

News from the Field

Turning literature into reality - tales from a Bangor University MSc Tropical Forestry summer school in Ghana

In the summer of 2015, 29 students (from 15 different countries) on the MSc Tropical Forestry (distance learning) programme at Bangor University embarked on a unique and shared learning experience, culminating in an intensive two week residential summer school in the forests of Ghana. Twenty-four of these students are from developing commonwealth countries and are grateful recipients of scholarships from the Commonwealth Scholarship Commission.

Ghana was chosen as the focus for this tropical forestry summer school for a number of reasons: English speaking; democratic and politically stable; with a relatively long history of forest research; a wide range of tropical forest habitats; a reputation for progressive forest management and community participation; and a number of high quality education and research institutions.

Taking advantage of the latest distance learning expertise and technologies at Bangor University, students initially spent ten weeks learning about forestry in Ghana, whilst based in their home countries. Drawing on historical, biographical, social, ecological and the latest scientific studies, students were able to discuss and develop a detailed understanding of the various issues facing Ghanaian forestry and the livelihoods dependant on this resource from a variety of perspectives. Online tests helped students check their progress and understanding. Students also worked in groups to develop draft research proposals, with the support of a staff mentor, which were then 'peer reviewed' by students from other groups to help improve the quality of the final proposals. These research proposals formed the basis for conducting short research projects in Ghana during the summer school.

What emerged from this process of 'physically remote orientation' was fascinating. Many of the articles focussed on negatives - insecure tenure, poverty, unsustainable levels of deforestation, illegal logging, disempowerment of forestry officials, corruption, vested interests, biodiversity loss, disconnects between policy rhetoric and on-the-ground realities.

The generally negative discourse of the literature led to a consensus that it's important to consider what type of research is carried out, what type of research is not carried out and what is, and is not, reported. Studies, by their very nature, tend to present partial interpretations of reality and therefore can only tell part of the truth. This is why we went to Ghana in July 2015: to learn for ourselves about the current situation, to carry out our own primary research, to develop our own understanding of the forests of Ghana.

The first week of the summer school enabled students to get to know each other in person and was designed to also provide an in-depth understanding of the forests of southern and central Ghana. Assisted by the University of Energy and Natural Resources (UENR), Sunyani, and Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, we were privileged to spend a week in the forests of the southern, western and central parts of Ghana. We visited various forest sites along an ecological gradient, starting in the lush, wet evergreen forests of Ankasa and heading north as far as the forest-savannah transition zone around Kintampo. We learned from discussions with landowners, tenant farmers, forest communities, charcoal-makers, permaculture experts, forest managers, forest scientists and custodians of sacred groves and monkey sanctuaries. This first week was clearly a success; one student later commented: "*The overview of the forest types was essential...I feel I now have a much greater appreciation of tropical forestry across a range of different site types*" (Figures 1-3).



Figure 1. Students conducting forest regeneration and ecological survey in Bobiri Forest Reserve, Ghana, July 2015 (Photo: © James Walmsley)



Figure 2. Visit to the Ghana Permaculture Institute, with the Tano Boase Sacred Grove in the background, Brong Ahafo Region, Ghana, July 2015 (Photo: © Bangor University)



Figure 3. Students held focus group discussions with local farmers to learn about their use of herbicides in agroforestry systems, Kubease village, Ashanti Region, Ghana, July 2015 (Photo: © Genevieve Lamond)

The second week of the summer school gave students the opportunity to implement the research proposals they had planned previously. Working closely with researchers and field staff from the Forestry Research Institute of Ghana (FORIG), students conducted five different research projects, with topics ranging from forest regeneration and ecology, to herbicide use in agroforestry systems, the bamboo supply chain, silvicultural standards in the Bobiri forest reserve, and forest inventory/growth modelling. Students had the opportunity to base themselves either at the beautiful Bobiri forest reserve and butterfly sanctuary, or within the FORIG compound in Kumasi where they could access facilities and other research organisations. The students presented the results of these studies on the final day of the summer school at the FORIG headquarters in Kumasi, in the company of a number of FORIG research staff (Figure 4).



Figure 4. Students and staff on the final day of the 2015 Tropical Forestry Summer School, FORIG HQ, Ghana (Photo: © Mark Rayment)

Reflecting on the contrast between the literature and the reality, perhaps the greatest surprise related to bamboo. Some literature suggested that there was a notable and growing bamboo bicycle industry in Ghana, generating employment and providing an opportunity for more sustainable transport solutions. The reality we found in and around Kumasi, where the bamboo bikes initiative is based, was a largely unmanaged bamboo resource with a very informal and vulnerable supply chain. Most landowners considered bamboo to be an invasive weed which, although useful for various subsistence purposes (*eg* construction, fencing, agricultural stakes, *etc*), was perceived to have little commercial value. Discussions with a number of bamboo enterprise owners in Kumasi revealed that,

in fact, substantial value can be added to raw bamboo through the manufacture of furniture and other artisanal products (along with bicycles). However, such enterprises are presently constrained by a number of supply- and demand-related issues. This clearly underscores the huge value in residential summer schools, which provide students with the opportunity to investigate current issues for themselves and gain confidence in their own abilities as effective researchers.

The summer school was a huge success, as evidenced by the overwhelmingly positive feedback we have since received from students, such as *“It was such a privilege to meet my fellow students and teaching staff; and completely indulge myself in the fascinating topic of tropical forestry for two weeks”*; *“It was great to have that immersion in the forest. Social and face-to-face networking with lecturers and fellow students brought the course to life, literally.”*

We very much believe that this educational experience has not only enabled the formation of many new friendships and contacts, but also enables our part-time students, who are all employed in the forestry profession, to continue to implement the principles of sustainable forest management in their own countries. The next tropical forestry summer school will take place in 2017.

We would like to thank the Commonwealth Scholarship Commission, the Forestry Research Institute of Ghana (FORIG), the University of Energy and Natural Resources (UENR), Kwame Nkrumah University of Science and Technology (KNUST) and Professor Philip Nyeko of Makerere University.

The MSc Tropical Forestry (distance learning) programme is fully accredited by the Institute of Chartered Foresters, as are all forestry degree programmes offered by Bangor University.

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