

Geography

News on Geography and
Environmental Science at
Queen Mary University of London



Queen Mary researcher helps identify geological setting for 'oldest footprints outside of Africa'

Dr Simon Lewis from the School of Geography has been working with a team of researchers led by the British Museum to piece together the geological puzzle surrounding what are thought to be the 'oldest footprints outside of Africa'. The findings, which were published in the international journal *Plos One*, are part of a continuing research project on the ancient human occupation of Britain.



The prints were discovered during geophysical survey work at Happisburgh on the north-east coast of Norfolk, England. Preserved in the muddy sediments of what was a river bank some 8–900,000 years ago, the familiar shapes of human feet caught the eye of the scientists.

Dr Lewis's research into the geology of the site has provided information on the sediments in which the footprints had been discovered. "My role is to work out the sequence of deposits at the site and how they were laid down. This means I can provide a geological context for the archaeological evidence of human occupation at the site."

A lecturer in physical geography, Dr Lewis added that the chance of encountering footprints such as this was extremely rare because not only had they survived environmental change and the passage of time, but their location was revealed when researchers were on site.

"Timing was everything. Just two weeks later and the researchers would not have seen them because



the tide would have eroded the footprints away," he added.

During the past ten years the sediments at Happisburgh have revealed a series of sites with stone tools and fossil bones. While it's not possible to tell what the makers of these footprints were doing, analysis has suggested that the prints were made from a mix of adults and children. Their discovery offers researchers an insight into the migration of pre-historic people into Britain.

- Dr Simon Lewis teaches undergraduates on BSc Geography and BSc Environmental Science.



Geographers to launch geocache hunt

Two geographers are using the worldwide game of geocaching to help their fellow students find out more about the Cairngorms this Easter.

Keen geocachers **Josh Leigh** and **Tom Howlin** will be testing first years' navigation skills on the field trip to the eastern Highlands of Scotland to help them explore the location and learn more about its environment.

Geocaching is an international game of hide and seek. A location is pinpointed using Global Positioning System (GPS) – or satellite – technology and people place an object, log book or puzzle for other geocachers to find; all you need is a smartphone or hand-held GPS. The details of the 'treasure' are logged online and geocachers can explore locations and geocaches around the world. Josh and Tom are planning to incorporate fieldwork into a geocache hunt looking for existing geocaches as well as create some new Queen Mary Geography ones of their own.

"Geocaching has really taken off in the past few years – from families with children to keen walkers and anyone interested in getting outdoors and exploring – it's popular with millions of people worldwide," 20-year-old Josh from Redhill, Surrey, explained. "Sometimes you will find an item – such as a keyring or figurine – sometimes there will be a series of puzzles to help you find your way to a location. It can test your mapping knowledge and skills of deduction, so just the sort of thing that helps in geographical fieldwork."

The two second year BSc Geography students attended the Cairngorms field trip as first years in 2013. Keen to take part again, they discussed turning their passion for geocaching into an educational tool with fieldtrip leader, **Professor Dave Horne**.

"We realised that we can easily integrate this new activity within existing fieldwork exercises, making them more fun and at the same time helping students to develop their navigation skills and spatial awareness," Professor Horne said.

The field trip to the Cairngorms is a key module in the BSc Geography and Environmental Science courses. Students learn a variety of core skills used to analyse the physical landscape, including field sketching, as well as developing subject knowledge in areas such as glacial geomorphology, rivers, water quality and conservation. An ideal location for fieldwork, the Cairngorms National Park contains five of the United Kingdom's highest mountains as well as its largest extent of semi-natural pine forest.

Professor Horne hopes that the project pioneered by Josh and Tom this year will become a regular opportunity for second year students to help out on the Cairngorms fieldtrip. "You might be walking past geocaches every day and not be aware they are there," 19-year-old Tom, who is from Ilford in east London, added. "It's not only about getting out and about in the countryside – cities like London have lots of geocaches, so we're hoping we can interest students in having a look online and getting involved to learn more about their local areas and east London too."

Tom and Josh's group in 2013.



Research spotlight – Dr David Reubi

The School of Geography's **Dr David Reubi** travelled to West Africa recently to investigate the effectiveness of US-led anti-smoking campaigning in the Republic of Togo.



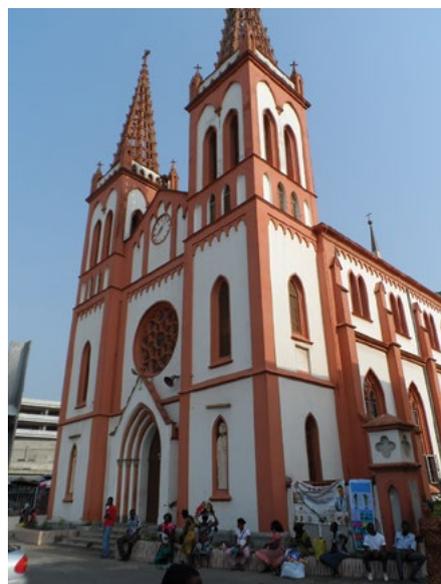
Dr Reubi (top right) meets with journalists and health activists concerned with tobacco control.

As part of a new Wellcome Trust research project Dr Reubi met and conducted interviews with anti-smoking activists and global health experts working at the African Tobacco Control Alliance and the National Consumer and Environmental Alliance in Lome, the capital of Togo. Both organisations receive generous financial and technical support from two American philanthropic institutions – Bloomberg Philanthropies and the Bill and Melinda Gates Foundation. This support is intended to set up national anti-smoking movements, build expert capacity in tobacco control, raise public awareness about the dangers of cigarettes and encourage the adoption of anti-smoking policies across the African continent.

The efforts of these two American philanthropies is inspired by a current sense of crisis amongst global health experts who perceive the next big epidemic in the Global South to be caused not by infectious diseases like HIV/AIDS or malaria but by chronic

diseases like cancer and diabetes. Indeed, according to the World Health Organisation, chronic diseases are already the biggest cause of mortality in Latin America and Asia and will soon be in sub-Saharan Africa. This, global health experts often explain, is 'the dark side of modernisation': with economic development and urbanisation, there is an increase in people's incomes and their desire to adopt modern, Western lifestyles like smoking and drinking associated with chronic diseases. Furthermore, the efforts of Bloomberg and Gates are characterised, like many other development projects, by the assumption that the answer to this new epidemic is the transfer of

'this exciting piece of research will illuminate ideas about development in Africa and the globalisation of knowledge and expertise through the lens of global health.'



The cathedral in downtown Lome, Togo.



The National Consumer and Environmental Alliance headquarters.

North American expertise to sub-Saharan Africa.

Dr Reubi's research project aims to understand the way that Africa's 'next' health crisis is being constructed and addressed. As David says, "it explores the possible challenges and limitations there might be when North American experiences and ideas about health and modernity are transported and transposed into African contexts. Specifically, it examines how forms of health activism and citizenship, models of epidemiological evidence as well as notions of healthy lifestyles and risk are translated, resisted and re-appropriated when they travel to Africa."

Dr Reubi's research is sponsored by the Wellcome Trust 2014–2017.

- You can learn more about the global politics of health on Dr Reubi's 3rd year module [Politics and Geographies of Global Health](#).

Prizes from two of geography's leading bodies



Queen Mary geography graduates **Ben Chandler** and **Emily Nash** have won awards in recognition of the outstanding quality of their undergraduate research.

Ben, who studied BSc Geography, claimed the 2014 Marjorie Sweeting Dissertation Prize from the British Society for Geomorphology. Examining a mountain in north-west Scotland called Ben More Coigach, Ben's work identified the climate conditions that would have been necessary to maintain the glaciers present across that part of Scotland some 12,000 years ago.

Senior lecturer in physical geography Dr Sven Lukas said understanding how glaciers worked in the past helps inform future projections of

climate change. "By mapping the glacial landforms that can be found in his study area today – for example moraines formed of glacial debris – Ben was able to calculate the amount of ice that would have been necessary at that altitude to sustain the glacier during the Younger Dryas cold period," Dr Lukas explained.

Meanwhile, the Royal Geographical Society (with IBG)'s History and Philosophy of Geography Research Group awarded BA Geography graduate Emily from Wiltshire their top dissertation prize and commended her for its originality. For her final year work she explored the strategies of an educational group called The Geography Collective – an eclectic group of activists, teachers, artists, academics and therapists who have teamed up to encourage young people to see and think about the world in new ways.

"Organisations such as the Geography Collective show that inquiries in geography are something that can happen in everyday life, as well as in the classroom and field trips. Children can explore life on their own doorstep and that's just as important to how they

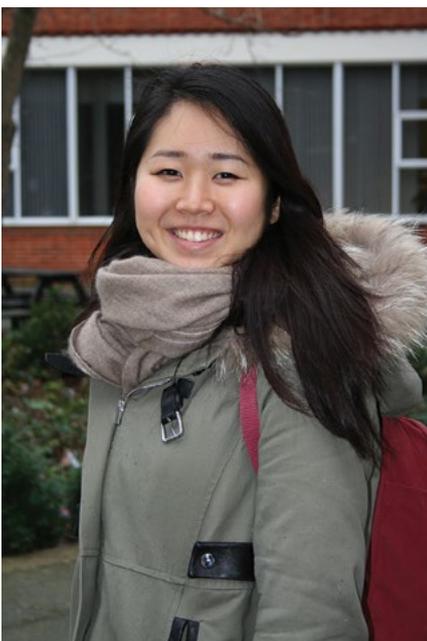


develop their world view," Emily, who is now working in communications, said. "Simple questions such as 'how do I get to work?' or 'where do I buy my eggs?' prompt young people to think geographically and this can inspire them to study the subject."

Supervisor Professor Catherine Nash said Emily's project was an exceptionally well formulated, structured and executed piece of work. "It is full of rich insight into what geography can be in the widest sense: imaginative, inclusive, engaged, adventurous and fun; inspiring for geographers of all kinds," she said.

- You can read more about studying BA and BSc Geography online at www.geog.qmul.ac.uk

International student interview – Momoko Ogihara



2nd year, Environmental Science student Momoko from Tokyo, Japan.

Why did you come to study here?

I really wanted to study Environmental Science in London, and Queen Mary was the best place to do this. I had already taken a one-year foundation programme in the UK which was a great way for me to reach the university's academic requirements. I applied to a number of universities, but I confirmed Queen Mary as my first choice when I came for an interview. I found out that you can choose your modules, and you can also choose the balance of lab work, fieldwork and desk-work. I also really liked the warm and friendly atmosphere in the School.

What do you enjoy most?

At the moment I'm really enjoying the module on Earth Systems Science. Different professors teach sections of the course based on their research

areas; for instance we're learning about carbon storage which I find fascinating. The course is great because there are lots of fieldtrips so you get to know people really well. It's nice because I'm not the only international student here; there are students from Saudi Arabia, Columbia, Germany and Sweden amongst other places. Hanging out with people from around the world is amazing; you learn so much from each other.

What would you like to do after your degree?

I'm really interested in sustainable farming and agriculture, especially the geochemistry side of things, so how nutrients are allocated in the soil. I want to pursue my interests in this area, perhaps through an internship and then a master's degree in London.

Geographical Association launches at Queen Mary



The School of Geography is the location for the Geographical Association's newest local branch – East London.

Teachers gathered at the launch event in January to hear about the legacy of the London Olympic Games for East London communities. Senior lecturer in physical geography **Dr Simon Carr**, who hosted the event, said it was a great opportunity for teachers to get a subject update and to meet with fellow geography teachers and share experiences. "We are hoping that the meetings will provide a forum for teachers to not only discuss ideas but to find out more about subjects, such as the London Olympic legacy, and how they can apply this in their teaching," he said.

"The Olympic Games has been a popular case study throughout the National Curriculum as well as at GCSE and A Level," Dr Carr added. "The geography of it runs across topics from urban renewal to health and society, the environment to the economy."

"Taking a closer look at some of the current research and work that is ongoing in 2014 is a great way to show teachers the continued effect this international event had on the local area and therefore its potential for their teaching resources."

The second Geographical Association (GA) event in March examined the politics of climate change and asked why there is no global consensus for action.



Dr Simon Carr (centre) with speakers Professor Steve Cummins from the London School of Hygiene and Tropical Medicine (left) and Lead Community Organiser at The East London Communities Organisation (TELCO) Emmanuel Gatora (right).

All GA events are free and are ideal for teachers, teaching assistants and anyone involved in the preparation, teaching and evaluation of teaching.

Read more online at www.geog.qmul.ac.uk

Geography and Environmental Science taster days



The School of Geography will be running two exciting courses this summer as part of the University of London's Taster Days to give current A-Level students a flavour of Queen Mary.

From climate and environmental change to health and inequality, activism and globalisation, visitors to this year's University of London Taster Days will sample some of the core subject areas being tackled by Queen Mary's geographers and environmental scientists.

The two half-day courses – one for geography and one for environmental science – are free and will include sample lectures, workshops and the chance to meet with current staff and students at the university's Mile End Campus in east London. Students will also get to see the School's labs in action.



"University is a big change from A-Level so it's good to get a glimpse of what it will be like"

Third year student and Geography Ambassador **Sasha Catchpole** (pictured above) was glad she visited lots of universities when she was studying her A-Levels so she had first-hand experience.

"There are so many decisions to make about courses and location when you are thinking about university that it's really important to visit as many as you can," she said. "I was interested to see Queen Mary because of its London location and because my subject was all on one campus and I really wanted that type of university experience. Meeting the lecturers and students and seeing their enthusiasm confirmed in my mind that this was the place for me."

Sasha, who is considering a career in the environmental sector, was keen to see the labs on her visit. "Going into the labs, seeing some of the equipment and watching some analysis taking place was great. We also got to find out more about staff research areas – it helped me start thinking about things I might be able to get involved with in my studies," the 20 year old explained, "plus it's great to meet other students in the same boat as you, weighing up decisions and finding out more."

Read more online at www.london.ac.uk/tasters

School of Geography photography competition

In 2013 the School of Geography ran its third annual photography competition for undergraduate and postgraduate students. **Theme:** 'Geography and Environmental Science has opened my eyes to issues of (in)justice and hope, transformation and change.' As the 2014 competition gets underway, here are the winners from last year to inspire.



Cape Coast, Ghana 2013

"This is a photograph of Cape Coast fishing port situated on Ghana's south coast. Looking beyond the vibrant colours and frenetic detail captured in this image, a geographical eye reveals so much more about what is happening here and why. It reveals a diverse local fishing economy, working hard to sustain the livelihoods of the men, women, and children who live and work within this community. Thus, for me, it reveals in a very visible sense the dynamics between economy, society, and environment that make Geography such a fascinating, complex, and applicable subject for understanding our world."

Joshua Philips, PhD student
Winner 2013.

Svalbard, Norway 2013

"This photograph shows the view from an ice cave within the front of a small Arctic glacier in Svalbard. It perfectly exemplifies that changes in physical state can appear to abide by different rules in extreme environments: even in April with air temperatures of -20°C , the sun is powerful enough to melt the glacier into dirty icicles. The view is towards an area that was part of the cave only the year before, but has undergone a catastrophic collapse due to meltwater erosion during the summer months. Together, these features highlight the significant transformations, both on a daily and yearly basis, that are on-going in even a relatively small and inactive Arctic glacier."

Harold Lovell, PhD student
Runner up 2013.



News in brief

- The School of Geography will be providing workshops to schools across the capital in the next year as it takes part of the new London Schools Geography Alliance. Our academics will help improve subject knowledge in secondary schools in an initiative headed by the Institute of Education and funded by the Greater London Authority (GLA). More details to follow on our website.
- A series of interviews with School of Geography graduates is now available on the School's QMULGeography YouTube channel. From business analyst to water treatment consultants, find out about some of the careers open to geography and environmental science graduates:
www.youtube.com/qmulgeography

