Autumn/Winter 2017

Geography

News on Geography and Environmental Science

Queen Mary University of London

From dinosaurs to DNA

Environmental Science BSc students Jason Lynch and Will Flynn spent a week with the School of Biological and Chemical Sciences and the Royal Tyrell Museum of Palaeontology at Dinosaur Provincial Park in Alberta, Canada this August.

Over the course of the week they observed fossils from the Late Cretaceous Period to understand species and their relationships, as part of a third-year module covering the wider topic of taxonomy; an area critical to the understanding of the world's biodiversity and



its conservation. Jason was lucky enough to find part of a hadrosaur maxilla with teeth still rooted inside. This lucky find won him "find of the day" and a place in the Dinosaur Provincial Park Museum collection. "We learnt about various and often controversial debates within the paleo research area via individual presentations to the rest of the group – my paper was about triceratops speciation using stratigraphy as a marker, lending a physical geography angle," said Jason. "The trip was a perfect opportunity to learn about the Cretaceous dinosaurs of Alberta, from one of the richest sites for dinosaur bones in the world. It was a great introduction to a module on taxonomy, a subject crucial to the future conservation of species on the planet, at a time when we are losing global biodiversity at an alarming rate," added Will. The trip is part of Species and their Relationships: Dinosaurs to DNA – a third-year module offered by QMUL's School of Biological and Chemical Sciences.



• Read more about the trip at geog.qmul.ac.uk/news

Geography Society continues to thrive

This year's Queen Mary Geography Society (QMGS) committee has worked hard over the summer alongside the Springboards team to welcome our new freshers. The team, led by third-year environmental scientist Will Flynn, is planning a full calendar of events and to involve students across all year groups and as many subjects as possible. They have already held their annual welcome pizza party and a walking tour of the East End. An academic talk followed by a film screening is planned for October. QMGS pride themselves to be one of the biggest and most diverse societies at QMUL. Get involved and check online for forthcoming events:

@QMULGeogSoc Queen Mary Geography Society



QMGS 2017-18, L-R: Ellie Wilson, Freddie Ward, Danial Naqvi, Will Flynn, Jason Lynch, Holly Barrett, Natalie Fairchild, Catarina da Silva Neves.

Third years celebrate at graduation

Nearly 200 students graduated from the School of Geography this July, earning degrees in geography, environmental science, as well as those with joint honours in business management. The School awards a number of students each year for exceptional academic achievement. Recipients this year included Koh Yi Thong (Michael Alexander Jones Memorial Award for the best overall performance in the third year, A.E. Smailes Prize for outstanding quality of his dissertation, and the Drapers' Company Prize for academic excellence); Kristine Bull-Sletholt and Denis McFadden (Roger Lee Prize for the best dissertation in economic geography, development geography or geography of social justice); Dina Morsy-Fahmy and Eleanor Dixon (Simon Tavana Writing Prize for creative writing in human geography third year coursework); Mishma Abraham (Environmental Science Outstanding Performance Prize); Tanzina Khatun, Shajiyah Begum-Uddin and Emma Woodhouse (Student Service and Contribution Award); and Charlotte Stevens and Neiad Adams-Austin (Principal's Prize).

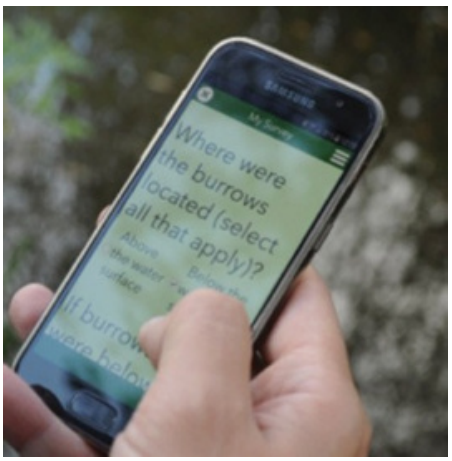
- See more images at flickr.com/photos/qmulgeog



Phone app to tackle invasive crayfish

The impacts of invasive species on river environments have significant implications for environmental management, causing economic and biodiversity damages. For example, the economic costs from invasive species are estimated at 5% of the global economy and at least £1.7 billion in Britain where surface water bodies are at risk.

In previous studies, researchers investigated the impacts of invasive crayfish on river restoration projects highlighting the extremely high management costs to mitigate their effects on biodiversity and damage to UK waterbodies.
In addition, other aquatic and terrestrial invaders (crab, fish, reptiles, rodents) potentially influence river bank stability, and the physical processes of rivers developing problems across the river ecosystems.



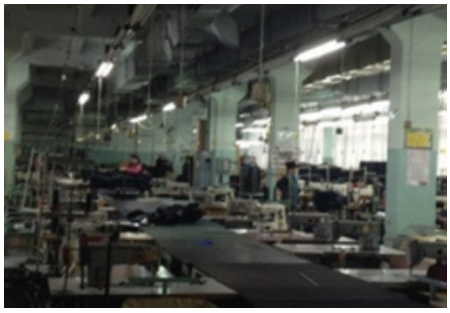
The direct link between invasive burrowing crayfish and erosion process has been demonstrated by recent research by Dr Gemma Harvey, Dr Alex Henshaw and PhD student Matej Faller from the School of Geography in collaboration with the Environment Agency. These findings provide the first quantitative evidence that burrowing by invasive crayfish is linked to river bank erosion across several river sites. However, their spatial distribution cannot be predicted using existing data sets. In order to generate an extensive database to collect information on burrow presence and characteristics, a new tool has been developed by the research team from the School of Geography formed by Dr Harvey, Dr Henshaw and Dr Giuditta Trinci. This work is part of the project 'Developing smartphone-based capability for assessing and managing the impacts of invasive species on river bank erosion', funded by the Queen Mary University of London Strategic Impact Fund. The new tool, designed for non-experts as well as Environment Agency teams, captures the occurrence and potential impacts of river banks burrowing by invasive animals. This data collection using smartphones is a pilot test for generating crowdsourced information to meet this important river management need.



- Keep an eye on geog.qmul.ac.uk/news for further updates

How effective can attempts to regulate working conditions be in a globalising world economy?

This is the question addressed by a research project called 'Working Beyond the Border: European Union Trade Agreements and International Labour Standards', led by the School of Geography's Professor Adrian Smith, involving an inter-disciplinary team of researchers at QMUL and the University of Warwick. The research, which is funded by the Economic and Social Research Council, is examining the workings of labour provisions, known as "trade and sustainable development" clauses, in recent international trade agreements. Major trading blocs, such as the European Union, are using these agreements to try to address working conditions around the world.



The research has been looking at the operation of three recent EU trade agreements with South Korea, Moldova and the Caribbean. It has been examining both the institutional arrangements set up by the agreements to monitor the effects of trade integration and globalisation on working conditions, as well as whether the agreements have impacts on workers employed in major export sectors in the three locations.

The researchers have been finding that the institutional arrangements, which involve civil society, trade union and employer organisations, are insufficient to monitor meaningfully the impacts of the agreements. The research has also been finding that the role of lead-firms in global supply chains is an important determinant of working conditions in these locations, but that the trade agreements do not adequately take these into account.

For example, in the context of the EU-Moldova agreement, the major export sector in Moldova is clothing, supplying garments to EU markets and consumers, especially in Italy and the UK. But the clothing sector is typified by poverty wages, the payment of wages at such a low level that they create difficulties for workers to get by, and by the intensification of work as the EU contractors require quick response manufacturing to satisfy rapidly changing consumer demand in the EU.

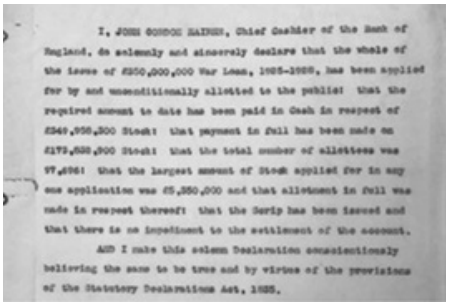
In a sector with limited trade union presence, workers feel the brunt of these commercial pressures. However, the trade agreement, which relies on International Labour Organisation labour standards, doesn't address these types of working conditions. In other words, there is a mismatch between the labour provisions in the trade agreement and the real experience of working in a major export sector like this.

- Read more at geog.qmul.ac.uk/research/beyondtheborder

Bank of England ledgers reveal failure of World War One loan scheme

The British government's initial efforts to pay for World War One through loans from the public was a spectacular failure, according to a new study using restricted Bank of England ledgers. The research reveals that the War Loan scheme failed to such an extent that the Bank of England had to secretly fund half the shortfall. The results are early findings from a major project on World War One finance, co-led by Professor Alastair Owens (School of Geography) and Dr Daniel Todman (School of History), geography PhD student Norma Cohen, and the Bank of England. "The fundraising effort was such a failure that the establishment felt compelled to cover it up. The truth would have led to a collapse in the price of outstanding war loans which would have endangered future capital raising. Had it come to light, it would have been a propaganda coup for the Germans – the great patriotic project to pay for the war was mostly a myth," said Ms Cohen.

- The project has been covered widely in the national media, for further details, see geog.qmul.ac.uk/news



I, JOHN GORDON HAINES, Chief Cashier of the Bank of England, do solemnly and sincerely declare that the whole of the issue of £350,000,000 War Loan, 1925-1928, has been applied for by and unconditionally allotted to the public: that the required amount to date has been paid in Cash in respect of £349,950,300 Stock: that payment in full has been made on £179,838,900 Stock: that the total number of allottees was 97,696: that the largest amount of Stock applied for in any one application was £5,350,000 and that allotment in full was made in respect thereof: that the Scrip has been issued and that there is no impediment to the settlement of the account.

AND I make this solemn Declaration conscientiously believing the same to be true and by virtue of the provisions of the Statutory Declarations Act, 1835.

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Early Career Fellowships for our researchers

Dr Edyta Materka and Dr Casper Laing Ebbensgaard have both been awarded Leverhulme Trust Early Career Fellowships, while Dr Claudia Soares has been awarded a British Academy Early Career Fellowship. Read details of their projects below.



Peasant Struggles in the Age of Disaster Capitalism – Dr Edyta Materka

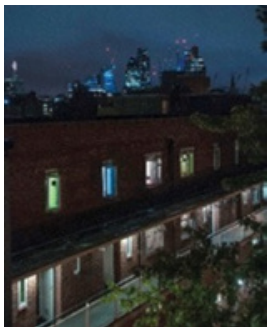
How do peasant societies put themselves back together again after natural disasters? Drawing from exploratory fieldwork and relief work experience in post-disaster Thailand, Haiti, Malawi, Nepal, Fiji, and the Philippines since 2005, Peasant Struggles examines how, in recovery efforts, subsistence-based communities are increasingly jeopardised by resurgent colonial labour systems, land-grabbing, and humanitarian utopianism. It explores how post-disaster zones, monopolised by public and private sector interests alike, are emerging sites of agrarian transformation as peasants recalibrate old strategies of accommodation and resistance to access ever conditional aid whilst devising new ways to reclaim agency over their land, labour, and way of life.





Luminous Verticality: The changing geographies of east London at night – Dr Casper Laing Ebbensgaard

263 high-rise buildings are planned for construction across London, and 47% will be located in London's East End. This project examines these newly designed residential high-rises within their wider context at night, by questioning to what extent the lived experience of the night is taken into account when designing them. The research questions the role of lighting design to how residents living in and nearby these new high-rises feel at home, or not at home at night. The research draws on ethnographic methods and will involve collaboration with a photographer and The Geffrye Museum of the Home.





An Emotional History of Institutional Childcare in Britain, Australia and Canada – Dr Claudia Soares

Recent government inquiries into children's institutional care have highlighted the failings of historical childcare systems in Britain, Australia and Canada. However, our understanding of the history of these institutions is partial. This transnational study explores children's social and emotional experiences of institutional care and 'aftercare' in Britain, Australia and Canada. Taking a child-centred approach and adapting a 'history of emotions' perspective, the project draws on children's and carers' written testimony to shift the scholarly debate to offer a more balanced assessment of these institutions that sets examples of trauma and abuse alongside more positive experiences of care.



Malaysia field trip launches this year

A brand-new field trip in the School of Geography starts this academic year: final-year students will travel to Penang and Kuala Lumpur in Malaysia to learn about and experience issues concerning economic growth, industrialisation, and labour conditions.



After a semester long course on these topics at QMUL, students will first visit the main location of industrialisation success in Penang. Next, students will travel to Kuala Lumpur to understand the role of politics in the struggles and challenges of ensuring economic growth leads to positive outcomes for all people. In both locations, students will conduct their own research projects based on specific research questions related to these wider issues.

"I am very excited to begin this course that will take a group of students to Malaysia – it promises to be a great experience!" said Dr Gale Raj-Reichert who will be leading the field class. "Students will gain a unique experience and set of skills by conducting field research in an emerging economy, analysing the information obtained, and presenting the analysis in an academic report," she added. "In this present era of contested globalisation, the study of economic geography is more important than ever before, as the uneven outcomes of economic activity have clear geographical effects over different scales," said Dr Raj-Reichert.

Forthcoming GA events

Events for teachers and sixth formers in 2017–18, hosted by the Geographical Association East London branch. Book your free place at geog.qmul.ac.uk/events or directly with Kate Amis at k.amis@qmul.ac.uk

- 1 Nov 2017 Practical Geographical Techniques: How to use Spearman's Rank Correlation Test using secondary data based on Tower Hamlets – Practical workshop with Kate Amis
- 22 Nov 2017 In Pursuit of Zero Health, human development and the eradication of polio in the Afghanistan-Pakistan borderlands – Subject knowledge enhancement with Dr Stephen Taylor
- 27 Nov 2017 Practical Geographical Techniques: How to use and analyse semi-structured interviews including coding and report writing using primary data collected at the session based in Tower Hamlets – Practical workshop with Kate Amis
- 7 Feb 2018 Future Coasts: How will natural processes and human interventions shape the future of our coasts in the UK and further afield? – Subject knowledge enhancement with Professor Kate Spencer
- 28 Feb 2018 Changing Places fieldwork CPD – Using Tower Hamlets with a Whitechapel and Spitalfields focus – CPD for teachers with Kate Amis
- 21 Mar 2018 Changing Places fieldwork CPD – Using Hackney with a Broadway Market focus – CPD for teachers with Kate Amis

Other events

- 11 Oct 2017 Keeping it in the family: inheritance and middle-class 'wealthfare' in Victorian and Edwardian Britain
The Inaugural Lecture of Professor Alastair Owens – hosted at the V&A Museum of Childhood
- 30 Nov 2017 Revolting New York: How 400 Years of Riot, Revolt, Uprising, and Revolution Shaped a City
14th David M. Smith Annual Lecture – Professor Donald Mitchell, Uppsala University, Sweden
- 12–16 Feb 2018 Visit by Distinguished Visiting Fellow – Professor Charles S. Maier, Leverett Saltonstall Professor of History, Harvard University, USA

See further details and book your place at geog.qmul.ac.uk/events

News in brief

- Geography at QMUL is ranked first and second in London for each of its subject areas in the 2017 National Student Survey (NSS). Human and Social Geography is first in London with a student satisfaction rate of 91 per cent, while Physical Geography and Environmental Sciences is second in London with a satisfaction rate of 86 per cent. Postgraduate students have also been satisfied with our courses, in fact nearly 94 per cent were overall satisfied.
- Dr Regan Koch has published a new book Key Thinkers on Cities. Dr Tim Brown has also published a book Health Geographies: A Critical Introduction.
- Students can now choose to study a four-year version of our undergraduate degree programmes and spend a full year studying abroad at one of our prestigious partner universities in Europe, North America, Australia, or Asia.
- Both undergraduate and postgraduate students at QMUL Geography have the opportunity to gain international academic experience, while benefitting from funding, at O.P. Jindal Global University in India as part of the Erasmus+ International Credit Mobility Programme.
- Visitors at Shuffle Festival this summer could see an exhibition called 'Defending the wild city' – a collaborative venture between former student and Shuffle Festival Director of Strategy, Lizzy Daish (Geography BA 2012), the Friends of Tower Hamlets Cemetery Park, and Dr Tim Brown from the School of Geography.
- A film directed by Eithne Nightingale has made the shortlist for the Arts and Humanities Research Council's prestigious 2017 Research in Film Awards. The film, called Ugwumpiti, has been shortlisted for the Best Research Film of the Year. Ugwumpiti tells the story of Maurice Nwokeji and his journey from war-torn Nigeria to London. Ugwumpiti is part of the School's award-winning Child Migrant Stories project.
Find out more at childmigrantstories.com

Read more news at geog.qmul.ac.uk/news

Hunting for ostracods in a Scottish loch

Towards the end of July Environmental Science BSc students Rene Lee and Lukasz Dobbek spent a few days at the Loch Leven National Nature Reserve (NNR) in Scotland, as part of their final year project. Their trip was supported by the QMUL Expedition Fund which offers financial assistance to undergraduate and postgraduate students for expeditions they would like to undertake during the summer vacation, linked to staff research or their own dissertation projects.



Rene (far left) and Lukasz (right) out on Loch Leven with Gus and Jeremy from the NNR. © Dave Horne

Rene and Lukasz assisted Professor Dave Horne as part of their work in a QConsult Research pilot project. They searched the loch for ostracods (microcrustaceans) and one in particular, Cytherissa lacustris – a rare species in the UK. The aim was to study the ecology of present-day ostracods, so that they could use their fossil records to reconstruct past climates across the British Isles. During their time, they met with Jeremy Squire and Gus Routledge from the NNR and were taken out on the loch in a boat to collect sediment samples from the bottom of the lake. They also visited St. Serf's Island, the site where Professor Horne took his preliminary samples the summer before. Over the next few days, they drove around the edge of the loch, finding any accessible point on the map and sampling it – it was essential that the physicochemical parameters (pH and electrical conductivity) were measured at each site.

After a day's work they would return to their hotel, set up the microscopes in their rooms, and spend the next few hours looking at the samples. This usually brought about some disappointment when some samples came back relatively devoid of ostracods, but much excitement when they discovered Cytherissa lacustris living in both deep and shallow water conditions. "The trip was a lovely bonus to my degree, carrying out my own fieldwork in a beautiful part of the United Kingdom," said Rene. "This fieldwork couldn't have been made possible without Dave, Jeremy, everyone at the NNR and the QMUL Expeditions Fund that supported both Lukasz and myself," he added.

RGS-IBG award supports overseas fieldwork

Geography BSc student Jessica Bracken was encouraged by her dissertation supervisor Dr Simon Carr earlier this year to apply for the Royal Geographical Society (with IBG)'s new Alexander Awards: Field Apprenticeship. Up to three grants of £1,500 each are offered to students who wish to undertake fieldwork overseas as a field apprentice led by an academic staff member. Read a summary below by Jessica.

"I made an application to the Alexander Award this summer and after being interviewed I found out I was a lucky recipient – much to my surprise! Being amongst one of the first recipients of the new award has made my summer a fun learning experience. Dr Carr and I visited the Arolla valley in Switzerland, and I got to see my very first glaciers up close; a textbook just does not compare! Dr Carr gave me the training to correctly identify and describe small-scale glacial erosional landforms in recently glaciated environments. Being a field apprentice gave me the confidence to undertake research crucial to my dissertation, which looks at 'Small-scale glacial erosional landforms in present and past glacial environments'. I travelled to the Shetland Islands later in the summer with fellow geographer Callum Sykes, where I was able to use my new-found transferable skills to record much older glacial erosional landforms, which would then tell me whether the islands were covered by a local ice cap or a continental ice sheet during the last glacial cycle. The award has been transformational for me, giving me confidence that I can succeed in my studies and I have learnt that I am capable of conducting fieldwork, and can have fun along the way! I encourage fellow students to look into the award and apply too."



Geographer Jessica Bracken and Dr Simon Carr at the Aletsch Glacier in the Swiss Alps.



Jessica at work. © Dr Simon Carr