

Report from attending EGU2014, funded via a BSG Postgraduate Conference Attendance Grant

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Overview

I was delighted to be awarded a Postgraduate Conference Attendance Grant from the BSG in February 2014, which totalled £375. This contributed critical funds that enabled me to attend the European Geosciences Union General Assembly 2014 in Vienna (27 April – 02 May 2014). I submitted two abstracts, both of which were accepted, one as an oral presentation in the 'Paleofloods throughout the Holocene' session, the other as a poster in 'Advances in Quaternary Geochronology'. Both sessions were well-attended and much constructive debate was stimulated. I was especially grateful for the award as this year's EGU is likely to be my final large, international conference prior to thesis submission and the advice and suggestions on my work that I received from a number of leading scientists will be invaluable in the coming months. There was also a particularly strong programme of events organised or co-organised by the Geomorphology Division this year, many of which were orientated at Early Career Scientists. The two Workshops for Young Geomorphologists run by eminent geomorphologists who shared their experiences in academia and expertise in statistical methods were invaluable and the Ralph Alger Bagnold and Penck metal lectures were stimulating.

Personal contribution

I delivered an oral presentation entitled 'A 2000-year palaeoflood record for northwest England from lake sediments' (Figure 1). My talk reported a suite of evidence that distinctive laminations of historical extreme floods have been preserved in Brotherswater, a small lake in eastern Cumbria and a key field site for my thesis. This was a prime opportunity to present a comprehensive picture of the sedimentary evidence as many leading palaeohydrologists and geomorphologists were in attendance, both from the fluvial sphere as well as groups working on lakes in the European Alps, Scandinavia and North America. There were many opportunities for further discussion, particularly at a lunch organised by the session convenors. I was also approached by a hydrologist from the Centre for Ecology and Hydrology who has been investigating the severe November 2009 floods in northwest England using contemporary data but was unaware there was scope of offer historical perspectives by exploring sediment sequences. Opportunities for further discussion and collaboration will ideally arise in the future. Please note the financial support received from the BSG was acknowledged on my final slide.

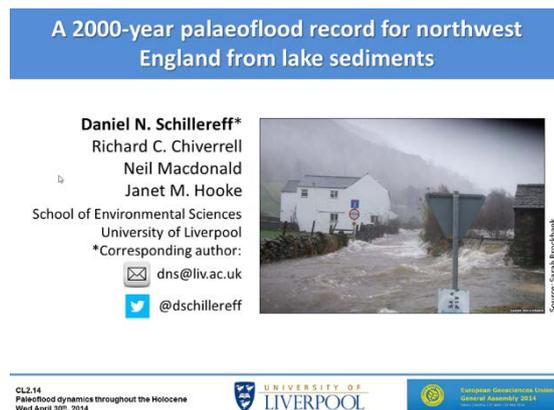


Figure 1. Title page of my EGU2014 oral presentation.

The poster, entitled 'Bayesian integration of radioisotope dating (^{210}Pb , ^{137}Cs , ^{241}Am , ^{14}C) and an 18-20th century mining history of Brotherswater, English Lake District', was submitted to the 'Advances in Quaternary Geochronology' session, part of the Geomorphology Programme Group. It was a well-attended session that was broad in scope and brought together geomorphologists, Quaternary scientists and palaeolimnologists. Much discussion was stimulated on best practice and pitfalls when attempting to date various sediment types and in a range of environmental settings. The data shown on my poster represent an unexpected angle of my PhD, whereby geochemical measurements of the lake sediment cores reveal a tight association between metal concentrations and the documented history of local lead mining. As a result, there appears to be scope to establish geochronological markers from the metal profiles and integrate them into Bayesian models. This opportunity to discuss different approaches to handling uncertainty in Bayesian models was thus especially timely. Please note financial support from the BSG was clearly acknowledged on the poster.

Use of BSG funds

The sum of £375 covered my accommodation and travel costs for EGU2014. I am grateful to the BSG for supporting my attendance and I will take away a huge amount of constructive feedback that will be valuable as I approach the write-up phase of my PhD.