BSG Fixed Term Working Group on The Anthropocene (2013-2015)

Group Composition

The composition of the WG changed over the period and expanded the final list of those who took some role in the WG is given below:

Tony Brown	AGB	University of Southampton (Chair, fluvial systems)
Stephen Tooth	ST	University of Wales, Aberystwyth (fluvial, S Africa)
Ralph Aalto	RA	University of Exeter (floodplains, soil erosion, temperate)
Richard Chiverell	RC	University of Liverpool (Quaternary, carbon dynamics)
Jo Bullard	JB	University of Loughborough (aeolian geomorpholopgy)
Peter Downs	PD	University of Plymouth (applied hydrology)
David Thomas	DT	University of Oxford (aeolian, Africa, deserts)
Jim Rose	JR	Royal Holloway University of London (Quaternary)
Varyl Thorndycraft	VRT	Royal Holloway University of London (Mediterranean, fluvial)
John Wainright	JW	University of Durham (complex response, and drylands)
Andy Plater	AP	University of Liverpool (coastal geomorphology)
Paollo Tarolli	PT	University of Padua (GIS, Lidar)

Activities Summary

The Anthropocene Working Group has now reached the end of its period and during its existence produced the following activities;

1. An ESEX Commentary Paper (Brown et al. 2013)

2. Sessions or activities at the following meetings:

    AGU 2012: AGB paper in Anthropocene session organised by M Ellis (BGS), JW organised a related session on landscape modelling. AGB also took part in a press conference.

    EGU 2013: AGB co-organiser of Anthropocene Session with Paoli Tarolli, Mark Macklin and H. Middelkoop, AGB also took part in a Press Conference in 2014.

    BSG 2013: Anthropocene Session at the BSG annual meeting held at RHUL in September (10th-11th) organised by VRT & AGB. This included a debate on the Anthropocene that was filmed and has appeared on the BSG website.

    EGU 2014: Two member of the WG co-convened “Human-Earth interaction from the Pleistocene to the Anthropocene: state of the science and future direction” which was a joint session between GM and two other Groups. Over 25 papers were submitted.

    RGS-IBG 2015. The Working Group is taking part in a Plenary debate and running a session of the first day of the conference.

3. Contributed a questionnaire on the Anthropocene to the BSG Website

4. Completion (in the process of submission) of a State of Science Paper for *ESP & L.*

5. The Group met 4 times at the Society of Antiquaries and the Geological Society, Burlington House.

The full result of the Group's discussions are summarised in the State of Science paper, however, in its initial submission the Group indicated that it would try and produce a consensus statement on the geomorphological status of the Anthropocene based on as wide discussions within BSG as possible. This was designed to form the basis for a discussion at BSG Executive Committee that could be used as a position statement if it was thought that was required.

Fixed Term Working Group on The Anthropocene (2013-2015): Position Statement

Having published our initial considerations into the relationship between geomorphology and the proposed new geological period, the 'Anthropocene' (Brown et al. 2013), our final consideration is published in Brown et al. (In Press). Although there is clear diachrony in the appearance, degree, and permanence of human impact on Global geomorphic systems overall humans have now had such a profound Global effect on these systems as to alter the present and future geomorphological and geological record. This supports the concept and use of the Anthropocene as a descriptive term for this new altered state of the Earth. However, attempts to define it formally require a boundary between the Anthropocene and the existing Holocene Epoch and this poses a multitude of problems, which are not fundamentally geomorphological in nature. It is highly doubtful that the procedures used to define past geological boundaries are appropriate in this case and the result would be a 'war of competing boundaries' based upon different criteria each with their own advantages and disadvantages. In this context therefore we cannot support attempts to formally demarcate a boundary, especially at Epoch level, and recommend that the term should be used in an informal manner only.

References

Brown, A. G., Tooth, S., Chiverrell, R., Rose, J., Thomas, D.S.G., Wainwright, J., Bullard, J., Thorndycraft, V., Aalto, R. and Downes, P. 2013. The Anthropocene: is there a geomorphological case? *Earth Surface Processes and Landforms* 38, 431–434.

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