

# **British Society for Geomorphology Finite Life Working Group on 'The Anthropocene'**

## **Brief Notes from a Meeting held at the Society of Antiquaries (Wheeler Room)**

**12am Monday 21<sup>st</sup> May, 2012.**

**Present:** R. Aalto (RA), A. G. Brown (AGB), Jo Bullard (JB), R. Chiverell (RC), J. Rose (JR), V. Thorndycraft (VT), J. Wainright (JW)

**1.1 Apologies:** Received from D. Thomas, P. Downs, S. Tooth

**1.2 Terms of Reference:** These were outlined by AGB as per the proposal made to the BSG Research Committee and the baseline options listed ranging from outright opposition to the term, to the acceptance of The Anthropocene as a formal Geological Epoch and the identification of a very late Holocene numerical boundary. Current members of the WG were also asked if there are other individuals who should be approached who could make a valuable contribution to the WG.

**1.3 Starting Points & Role of BSG:** A wide ranging discussion ensued revolving around the following questions;

a) The justification for some formalisation of "The Anthropocene". It was felt by the WG that there was a *bona fide* case for this and that geomorphology was central to such a case and so therefore BSG had to take part in the debate.

b) Concern was expressed that Geomorphologists as a research community, including the BSG, had largely been excluded from, or had not engaged with, this debate which was now being promoted by the geological community with little reference to geomorphology.

c) The argument relating to the dominance and magnitude of the anthropogenic sediment flux was discussed and key papers (by Wilkinson) will be disseminated. The WG agreed that geomorphological processes and specifically Earth surface sediment transport had to be central to any meaningful formalisation of 'The Anthropocene' and its boundary. It was also stressed that even if it was defined as some stratigraphic (geological) boundary geomorphologists had a major part to play in the understanding the nature of that boundary largely due to its relative diachronic and recent nature.

d) Any geomorphologically defined boundary would almost inevitably be diachronous and the WG felt that recognising and quantifying that diachroneity was part of the role of the geomorphological community at large and that views and expert opinion should be sought in order to inform the WG and BSG.

**1.4 Current Initiatives & Activities:** AGB outlines the following current initiatives;

a) An Anthropocene Special Publication of the Geological Society being edited by Colin Waters *et al.* which has some geomorphological content (Chapter 7: Hooke, Lang & Middelkoop)

b) A recently proposed research journal called *The Anthropocene* to be published by SAGE.

c) An Anthropocene session proposed at the 2012 AGU by Mike Ellis (BGS). JW has also proposed a session theme which could contain an Anthropocene element.

These initiatives were discussed and in the light of the earlier discussion actions were recommended.

**1.5 BSG Topics & Responsibilities (Actions):** The WG has suggested the following actions to further the above agenda;

a) An 'ESEX Commentary' on Geomorphology and the Anthropocene to be submitted to *ESPL* (c. 1,500 words) asap. (AGB+all)

b) Provide both a short explanatory paragraph and question for BSG members on the BSG or BSG linked website. The question will be both to gauge BSG members views on the Anthropocene and when is started in their research areas(s). The following wording has been suggested: "Do you recognise the 'Anthropocene' as a valid concept in geomorphology and if so when in your opinion did anthropogenic processes become dominant over natural conditions in your research area or areas". Respondents would be able to give several research areas and appropriate dates and references. The results of this survey will be used in the following Viewpoint article.(RC/JW)

c) A QSR Viewpoint article (c. 2000-3000 words) focussing on not only the criticality of geomorphology but also the question of spatial diachroneity. RC suggested a working title of "Muddying the waters: an earth surface process perspective on the beginning of the Anthropocene?". The deadline is October 2012 for publication in 2013.(RC/AGB/all)

d) A WG input to Anthropocene sessions at AGU (2012), EGU/AIG (2013) and if appropriate the upcoming Stratigraphic Smith Conference sponsored by the Geological Society.

e) A session at the BSG annual meeting to be held at RHUL in September (10<sup>th</sup>-11<sup>th</sup>) 2013.

f) A major article in *ESPL* (State of Science) on the Anthropocene and geomorphology with at least three major components;

a) Methods and criteria for recognising dominant human impact

b) Modelling anthropogenic dominance

c) Spatial diachrony in the Anthropocene

g) Other possible outcomes discussed included a contribution to NERC *Planet*, possible media coverage and a possible 'Geomorphology & the Anthropocene' meeting at the Geological Society sometime in late 2013 or early 2014.

h) Input into the next NERC strategy document (a consultation version of which is believed to be available in a few months time).

**1.6 Future WG Activities & Meetings:** The next meeting of the WG will be scheduled in November or possibly December 2012 (avoiding AGU) at the Geological Society, London.

AGB 22 May 2012