Humans and Biosphere Commission, President's Annual Report 2012-2013

HAB COMM Mission

The Humans and Biosphere Commission fosters problem-oriented study of the effects that changes in Quaternary climates and palaeoenvironments have had on organisms (individuals, communities, species), as well as the relationships between humans and their environment. The Commission promotes innovative cross-disciplinary research and communication, notably by helping to bring together specialists in all sub-fields of palaeoecology, archaeology, geology and palaeoanthropology, including experts in the study of cultural processes, in order to understand human responses to global and regional changes. An ancillary goal is to provide a unifying framework for the exchange of information between palaeoecologists and neo-ecologists working on issues of global change. The Commission promotes interchange among specialists from any and all nations of the world, involving young scientists and those from developing countries.

HAB COMM Officers

President: Nicki Whitehouse (School of Geography, Archaeology & Palaeoecology, Queen's University Belfast). N.B. From 1st September: School of Geography, Earth and Environmental Sciences, Plymouth University (new email: nicola.whitehouse@plymouth.ac.uk)

Vice-Presidents: Yan Zhao (Lanzhou University, China) and Luis Borrero (CONICET & University of Buenos Aires, Argentina). Emails: yanzhao@lzu.edu.cn; laborrero2003@yahoo.com

Secretary: Mike Akaegbobi (University of Ibadan, Nigeria). Email: izumike20022002@yahoo.com

Newsletter editor: Encarni Motoya (Open University, UK). Email: Encarni.Montoya@open.ac.uk

Early Career Researcher (ECR) Reps: Sallie Borrough and Alex MacKay (Emails: mackay.ac@gmail.com)

Summary of activities over 2012:

(i) List of corresponding members

Our list of corresponding members stands at 540 individuals with further researchers being added regularly. We have good coverage of members in Europe and the US, but our list of members elsewhere is more limited. Efforts are being made to target these individuals, via emails to other organizations and lists and the use of social media to highlight the activities of the Commission. To this end, I also attended the PAGES OSM meeting in India and took the opportunity to further highlight the work of INQUA and Hab Comm with researchers

working on the Indian sub-continent. INQUA country representatives are all included on our list of members.

(ii) Communications with members

ii.i Newsletter

Communication of our activities and projects continues to be facilitated via a newsletter that is produced 4 times a year. A newsletter editor was recently appointed (Sept 2012), Encarni Motoya, which has greatly assisted the production of regular newsletters. Material is driven by the President and Secretary on specific Hab Comm activities, updates on Hab Comm projects and meetings (via project leaders); however, an increasingly amount of material is being submitted via the members themselves. This indicates that the newsletter is a useful means of communication and dissemination for the members for HAB COMM and related activities.

Newsletters are emailed out to the list of members, uploaded onto our web site and also advertised on Twitter.

ii.ii HAB COMM web site

The HAB COMM web site http://www.inqua.org/habcom/index.html is regularly maintained and updated and kept up to date by Dr Phil Barratt. News items and meetings of interest are posted up regularly, mostly generated as a result of the newsletter traffic and items sent to us directly for posting. Google stats indicate that the web site receives approximately 100 new hits a month, with the majority (77%) of traffic from the US and Europe. This reinforces the point made above that we have further work to do to engage with our wider community of researchers although we are clearly making some progress as a point of information.

(iii) Appointment of Advisory Board

Over the course of 2013, we initiated the process of appointing an Advisory Board, in consultation with the vice-Presidents. 7 individuals have been approached and appointed to sit on the Board of HAB COMM, as follows:

Dr Jean Philippe Brugal, (France)

Dr Brian Chase (France)

Dr Jacqueline Gill (US)

Prof Gary Haynes (US)

Prof Steve Jackson (US)

Prof Houyuan Lu (China)

Prof Donatella Magri (Italy)

A further 5 individuals are to be appointed. The role of the advisory board will be to help guide and promote the direction of the Commission and help facilitate the setting up of IFG's and projects.

(iv) ECR activities

We have encouraged ECR activities via the appointment of Sallie Burrough and Alex MacKay. They provide an update on ECR activities via the newsletter, which they contribute to regularly. Items of interest to ECR's are also forwarded for dissemination via the ECR Facebook Page. We have also facilitated the involvement of one of the Editors of *Journal of Archaeological Science* in the upcoming ECR meeting at Wollongong. Dr Robin Torrence, University of Sydney, has kindly agreed to run a workshop session on peer review at the meeting.

(v) Reporting on HAB COMM projects

Hab Comm had 4 projects (PI's: Izuho; Ogola; Chase; Ono) approved for funding in 2012, with a further project allowed to roll over from 2011 (Parth R. Chauhan: *Quaternary environments and hominid evolution in India*). All projects provided reports by the required deadline. Two projects have requested to be allowed to roll over funds into 2013: Christine Ogola's and Brian Chase & Alex MacKay.

Chauhan used INQUA funds to support a total of 4 meetings over the period 2010-2012; the main objective of these meetings was to implement a long-term project to understand Plio-Pleistocene paleoenvironments, vertebrate paleontology and modern bone preservation patterns in India by focusing on the well-known Siwalik Hills as the primary study area. The group has a clear plan of action to further develop the work and to seek funding to support this. Publications are anticipated for *Quaternary International.*

Izuho's '*Human technological and behavioral adaptation to the Last Glacial Maximum in Northeast Asia*' project was concerned with understanding the relationship between environmental changes and human technological organization around the LGM. Funds were used to support an international workshop in Tokyo, with invited speakers from Japan, Mongolia, Russia and the US. Young and early-career or developing-country researchers were supported by this INQUA project grant. The exploration of technology with climate and ecosystem/resource changes is innovative and insightful.

Ono's '*Palaeoenvironment and lithic raw material exploitation in North and East Asia during MIS3 and MIS2*' project organized an international workshop entitled "Lithic raw material exploitation and circulation in prehistory: a comparative perspective in diverse palaeoenvironment" (September 28, 2012), at Meiji University, Tokyo. The workshop explored lithic raw material procurement systems and distribution patterns across Japan and adjoining areas of the Russian Far East and Korean Peninsula and compared these patterns between Europe and East Asia. Six publications have emanated from this work.

Chase & MacKay's '*Context and controls on modern human behavior in southern Africa: human-environment interactions in the late Pleistocene*' report that their activities have focused on compiling (i) a database of environmental and archaeological data from southern Africa; (ii) a meeting in Cape Town in May 2012 between Leaders to establish database

contents; (iii) a meeting at Gobabeb, Namibia in September 2012, coinciding with the SASQUA 2012 Conference. The project leaders were unable to organize a full project meeting due to conflicts in participants' fieldwork schedules. They have requested that the funds from 2012 be rolled- over to 2013 so that they are able to cover transportation and meeting costs for a full, multi- day meeting in Cape Town in May 2013. They report they have one paper in preparation combining palaeoenvironmental and archaeological data spanning the last 55 kyr from a series of sites in close proximity in a tributary valley of the Doring River, South Africa.

Ogola and Kinyanjui's Conference: '*Equatorial Eastern Africa Quaternary, Climate Change and Variability*' requested a carry over of funds and postponement of the meeting into 2013. Initially scheduled for Feb 2013, the organizers did not wish to clash with the PAGES meeting in Goa, India. Following discussions with a sister regional association, it was decided to have back-to-back conferences for the two associations in Kenya in July 2013, to give interested participants the opportunity to attend both meetings. The applicants have continued to fundraise for the conference, including applications to PAGES and the Research Institute for Development (IRD), which have been confirmed. Calls for papers have been put out. Opportunities for networking have continued, with some participants interested in hosting special sessions aimed at bringing together researchers interested in specific aspects of environment and climate change (Carnivore research group, Heritage Resource Governance (HEROGO) with the Research Institute for Development (IRD). The potential of this topic for IFG development is discussed further below.

(vi) International Focus Groups

This remains an area that requires development. No proposals have been received for IFG's for 2013. This may be partially to do with the time investment involved in setting up an IFG possibly putting some potentially applicants off, but perhaps because some archaeologists are less used to working on large 'synthetic' projects. Many archaeologists are concerned with regional narratives, and to some degree this is probably also true of palaeoenvironmental researchers. However, this situation is starting to change, in both communities, as archaeologists and palaeoecologists start to appreciate the important perspectives they can provide to the environmental challenges facing our planet. This is evidenced by, for the instance, the huge interest in the 'Palaeo50' meeting recently held in Oxford, December 2012, which focused upon the research priorities for palaeoecology and the recognition that it has significant contributions to make to our understanding of ecology, species behaviour, communities and how these may react to global change. Archaeologists are likewise appreciating that knowledge of the archaeological record has much to contribute to issues such as changing land cover over the Holocene and feedbacks with the climate system and food security.

Two IFG's are currently in development.

The first will be lead by Masami Izuho (Tokyo Metropolitan University), Laurence G. Strauss (University of New Mexico) and Ian Buvit (Central Washington University). The IFG would focus upon 'L*ate Pleistocene Human- Environmental interactions, focusing especially on*

Human technological and behavioral adaptation to before/within/after the Last Glacial Maximum across Eurasia'. This is a potentially exciting new development, allowing a wider Eurasian perspective of human adaptation.

The other initiative is still developing, focusing upon '*Animal predator-prey interactions and ecosystem function*' and is likely to be of wide interest since this is an area of research which is attracting quite a lot of research interest, with considerable further opportunity for growth. The idea for this IFG has emerged as a consequence of a new project, focusing on large African carnivores (led by Jean Philippe Brugal); several other researchers have expressed an interest in developing a wider project, which would not be geographically restricted and which would also include herbivores.

Researchers interested in being involved in these initiatives should make contact with either of the Vice Presidents, President of the Commission or the individuals concerned.

(viii) Other matters of concern to HAB COMM scientists

We took the opportunity to find out what difficulties Hab Comm scientists face. Researchers in Africa highlight that members in EAQUA and WAQUA need access to capacity building especially in Quaternary Paleoclimate and Lake sedimentology, research designs and writing of scientific papers. Scientist members of EAQUA and WAQUA would also value opportunities for collaborative research with scientists in developed countries working in established laboratories as postdocs and on short term exchange programmes etc.

Other arrangements highlighted included the option of being able to send samples for isotope and C14 dating at minimal costs.

(ix) Plan for the year ahead

The priority for 2013 will be concerned with appointing the rest of the Advisory Board and developing IFG's and projects focusing on broad problems of interest to the HAB COMM Community. We would also like to encourage capacity building with scholars from low GDP countries, young researchers and ensure a better gender balance in INQUA-associated or related activities.

N.J. Whitehouse, 1st March 2013