Investigating the Palaeolithic Landscapes and Archaeology of the Jizan Region, Southwestern Saudi Arabia

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1. Introduction

The archaeology of the Arabian Peninsula is pivotal to understanding Pleistocene hominin dispersals from Africa, with growing evidence for a Southern Route out of Africa, through the Bab al Mandab Straits into Arabia (e.g. Bevin 2006; Petraglia and Alsharekh 2003). Despite recent key developments in our knowledge of the hominin occupation of the Arabian Peninsula (Armitage et al. 2011b; Delagnes et al. 2012; Petraglia et al. 2011; Rose et al. 2011), our understanding of the timing of dispersals of hominin populations into Arabia, and the factors controlling and facilitating these dispersals remains unclear.

Survey in Jizan region, Saudi Arabia (Fig. 1), is being undertaken by the DISPERSE project to examine the role of landscape factors, e.g. water or raw material availability and topographic features, in the dispersal of hominin populations (Bailey et al. 2012). Yet, as part of the survey, the taphonomic impact of landscape evolution along and after Palaeolithic occupation on the observed archaeological record must be considered. Classification of landforms, and their potential for site preservation and visibility, will be used to drive the survey strategies employed in each area, as well as informing the future interpretation of site distributions.

2. Preliminary Landscape Classification

Classifications were assigned visually in ArcMap10 by comparison of satellite imagery (LandSat ETM+ Geocover 2000 mosaics, GoogleEarth) and elevation data (CGIAR-CSI SRTM, ASTER GDEM v2) with field observations made in 2012.

2.1 Palaeolithic sites identified

- Palaeolithic sites identified by Zarins et al. (1980,1981)
- Palaeolithic artefacts observed by DISPERSE

2.2 Landform classification

- Escarpment and jebels
- Volcanics and Lava Flows
- Basement
- Alluvial fans
- Alluvium (first phase)
- Alluvium (second phase)
- Coastal Sediments
- Palaeolithic sites identified by Zarins et al. (1980,1981)
- Palaeolithic artefacts observed by DISPERSE

2.3 Future Directions

The initial landscape classifications, derived through remote sensing data and field observations, will be used to guide the survey strategies employed during fieldwork in February-March 2013. During this work, the archaeological potential of a range of these landforms will be investigated in order to test the interpretations of artefact visibility outlined above. Ultimately, this data will allow the new and known Palaeolithic sites to be integrated within a model of evolving landscapes throughout Jizan region. Such integration will allow the reconstruction of landscapes of hominin occupation in Pleistocene Arabia, and the assessment of the potential factors that influenced the dispersal of early hominin populations.

Acknowledgements:

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