

## **GIS and landscape archaeology: The South Cadbury Environs Project**

Gary Lock  
*University of Oxford*  
UK  
*gary.lock@arch.ox.ac.uk*  
John Pouncett  
*University of Oxford*  
UK  
*johnpouncett@ase-limited.co.uk*

### ***Abstract***

Excavations at South Cadbury hillfort, Somerset, England, revealed a long sequence of activity spanning the later prehistoric, Romano-British and post-Roman periods. For the last fifteen years the South Cadbury Environs Project has been investigating the surrounding landscape of the hillfort using extensive geophysical survey, test-pitting and excavation in an attempt to understand the wider developmental context of the hillfort's occupation. The innovative use of GIS and the development of new analytical techniques have been central to this work and two elements are discussed in this paper. The first is the use of Network Analysis to date the complex of linear features, ditches, detailed within the geophysics through the circulation of spot dates from excavation around the 'network'. This has resulted in a proposed phasing which is discussed here together with issues faced in developing the methodology. The second element concerns the modeling of erosion and colluviation, and the implications of this for the understanding of the archaeology. By extrapolating from areas of colluviation known through excavation, it has been possible to develop detailed models across the landscape that highlight the impact of colluvial deposits on the discovery of archaeology in this area.

***Keywords:*** *South Cadbury, GIS, Network Analysis, geophysics, colluviation modeling*