Editorial Introduction: 25 Years of Geoarchaeology

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2010 marks the 25th anniversary of the founding of Geoarchaeology: An International Journal. Jack Donahue, then based in the Department of Anthropology at the University of Pittsburgh, was the founding editor and the first issue was published in January 1986 (Figure 1). Collaboration between geologists, geographers, and archaeologists takes place in many settings and it has a distinguished history that reaches back into the 19th century (Goldberg & Macphail, 2006; Goudie, 1976; Grayson, 1990; Mandel, 2000; Macklin & Woodward, 2009). This journal emerged from the rapid growth in interdisciplinary research that took place in the 1970s and 1980s as new ideas and new methods (especially in geochronology and paleoenvironmental reconstruction) led to closer links between archaeologists and geoscientists, both in the field and in the laboratory. Looking back at the first editorial board of Geoarchaeology shows that many of the pioneers of this field, themselves representing a wide range of disciplinary backgrounds and traditions, had built highly productive careers at this interface. The editorial board of 1986 also featured a number of geoscientists who had moved away from traditional hard-rock and Quaternary research to forge new research agendas tackling archaeological questions. The rapid growth in the relationship between the geosciences and archaeology led to the need for a peer-reviewed journal that could present and promote this growing body of interdisciplinary research. Jack Donahue penned the following editorial in the first issue:

The goal of the journal Geoarchaeology is to provide a publication outlet for interdisciplinary research involving the Earth Sciences and Archaeology. Such research has become increasingly abundant during the last twenty years and appears in many different publications ranging from several well recognized journals which are not specifically geoarchaeological in nature through monographs to unpublished site reports generated during the performance of contract or public archaeology.

It is our intention to cover all aspects of the interface between the Earth Sciences and Archaeology. Thus, any research paper within this broad area is encouraged. It should be emphasized that an interface involves two-way interaction, so that research making use of archaeologic data to expand geologic interpretation and understanding is just as valuable as the reverse.

The major portion of the journal will be devoted to research papers incorporating both geologic and archaeologic data. Review papers covering different aspects of this interdisciplinary field are also welcome. In addition, both book and meeting reviews in the area of geoarchaeology will be published.

Finally, it is not the purpose of this journal to define, circumscribe, or attempt to explain what geoarchaeology is or, still less, should be. This subject has already been thoroughly exhausted to no resolution. Rather Geoarchaeology helps to illustrate what this specialization is by example, that is, by what it does. The success of that enterprise we leave to the reader.
At the end of 2009 *Geoarchaeology* had published well over one thousand research articles and book reviews at an average of 28 research articles and 19 book reviews per year. The journal has also published 17 special issues on a wide range of themes, including the sedimentary records in caves and rockshelters and landscape dynamics in dryland environments. Since the first volume, the discipline of geoarchaeology has continued to flourish, with an increasing number of national and international bodies and workshops and countless teams engaged in field projects across six continents. This growth is reflected in the geographical spread of the papers published in the journal. Since 1986, there has been an increasing number of articles based on research in Europe, Asia, Africa, Australia, and Oceania. The ratio of published papers based on site- or region-specific research in the Western and Eastern hemispheres has shifted from about 13:5 in 1986 to 15:19 in 2009. This is the outcome of a discipline that continues to mature, and it also reflects the efforts of past and present editors.
and editorial board members to make this a truly international journal. Jack Donahue steered the journal through its first decade with an international editorial board of 23. We were recently able to get in touch with Jack (Figure 2) and he kindly penned a few lines about the early days of the journal:

I was on a GSA field trip with Rhodes Fairbridge when he asked me whether I would be interested in editing a new journal in geoarchaeology. I was already involved in geoarchaeology with excavations at Meadowcroft Rockshelter in western Pennsylvania and Bab edh-Drah and Numeira, Early Bronze Age sites in the Dead Sea Valley of Jordan. As my research was progressing, I realized that a journal in the field of geoarchaeology would be a valuable publication outlet. Without appreciating how much work I was getting into, I said yes. Soliciting papers for the new journal took time and energy but after three years, John Wiley told me the journal was in the black, two years earlier than expected. They then asked me to increase from a quarterly to a bimonthly schedule, to which I agreed. After ten years, I decided it was time for a new editor-in-chief to bring new ideas and vigour to the journal. Looking at the latest numbers of Geoarchaeology, I feel proud to have originated this venture.

As a discipline, geoarchaeology continues to prosper within and beyond academia. The most downloaded article in 2009, for example, is a product of collaboration between English Heritage and the British Geological Survey (Ward, Smith, & Lawley, 2009). This paper presents a series of maps and related data illustrating the great diversity of soils and surficial sediments across Britain and explores the potential of these large data sets to aid archaeological preservation and the sustainable management of the archaeological resource. In the U.K., geoarchaeology courses now feature...
in many university departments as part of undergraduate programs and, in a few places, as full-blown MSc courses. Major international geoarchaeology conferences have been held in Exeter (2006) and Sheffield (2009) in recent times, with keynote speakers from around the world. The growth of international networks in geoarchaeology is exemplified by the fact that the Exeter papers are now in press in a Geological Society of America Special Publication (Brown, Butzer, & Basell, in press), and a selection of papers from the Sheffield conference will be published in a special issue of this journal in 2010. The Geoarchaeology Working Group of the International Association of Geomorphologists (IAG) has now been active since 1997 and holds regular workshops, field meetings, and international conferences. A highlight of 2010 will be the international conference in Cairo on Landscape Archaeology: Egypt and the Mediterranean World (September 19–21, 2010), organized by the Institut Français d’Archéologie Orientale (IFAO) in association with several organizations, including the Geoarchaeology Working Group of the IAG.

In North America, geoarchaeology continues to increase its visibility in both academic and private-sector settings. The latest research is showcased annually at major meetings through sessions organized by the Archaeological Geology Division of the Geological Society of America and the Geoarchaeology Interest Group of the Society for American Archaeology. A welcome development is the drive to see geoarchaeology featuring more prominently at the annual meeting of the Association for American Geographers. Geoarchaeology also featured prominently in the 2008 Binghamton Geomorphology Symposium in Austin, Texas, on Fluvial Deposits and Environmental History: Geoarchaeology, Palaeohydrology, and Adjustment to Environmental Change (Hudson, Butzer, & Beach, 2008). Geoarchaeology programs remain common in geography, geology, and anthropology departments at colleges and universities, and environmental and cultural resource management firms and government agencies are increasingly hiring personnel with geoarchaeological experience (Schuldenrein, 2006, 2007).

Geoarchaeology the journal, and geoarchaeology the discipline, have gone from strength to strength over the last quarter of a century since Jack Donahue began gathering papers together for that first issue. We anticipate that the discipline will continue to grow, providing greater insight into our collective past while finding increasing relevance to current social and environmental challenges where deep time perspectives of human adaptation and ecological change are beneficial. The last 25 years have seen important advances in many areas of geoarchaeological and related research (see Bell & Walker, 2005; Goldberg & Macphail, 2006), including work on Quaternary landscape dynamics, multi-proxy paleoclimatic reconstruction, dating methods, the use of micromorphology in the elucidation of site-formation processes, the geophysical investigation of sites and sediments, and in the physical and chemical characterization of artifacts and their sources. We are likely to see improved quantification of the anthropogenic component in site sediment records, and new opportunities are opening up in the application of geoarchaeological methods to forensic science.

Over the last two decades, wider recognition of the significance of rapid climate and ecosystem change during key periods in the development of our own species has produced a new research agenda for the study of the Late Pleistocene and Holocene
in all parts of the globe as researchers seek to understand human responses to abrupt environmental change (Woodward, 2009). Very recent developments in radiocarbon dating pretreatment protocols (Jacobi, Higham, & Bronk-Ramsey, 2006; Higham et al., 2009) and the extension of calibration tools beyond 30,000 years have posed new challenges and opportunities for the study of the human past. All of this has reinvigorated the study of human–environment interactions over the last 50,000 years, and the geoarchaeological community is well placed to make a full contribution to these and many other areas. The vibrant state of geoarchaeological research and the global reach of the geoarchaeological community owe much to the solid foundations that Jack Donahue and his editorial board put down in the early years of the journal.

After many years of service to the journal, Marie-Agnès Courty and Glen Fredlund stepped down as Associate Editors at the end of 2009. We would like to thank them for their valuable contributions to Geoarchaeology.

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REFERENCES


