Project
Zooarchaeology of Neolithic Ulucak
Zooarchaeology of a portion of the vertebrate remains from Ulucak Höyük's Neolithic layers

Project Abstract

Introduction
The dataset comprises macro-zooarchaeological information from hand-collected vertebrate remains from the Neolithic layers of Ulucak Höyük (ca. 7000-5700 cal. BC, Izmir-Turkey). The dataset represents the only available Neolithic zooarchaeological assemblage from a vast and crucial region between the Lake District (where Hacılar is located) and mainland Greece. A good portion of the dataset includes information about the pre-6500 BC layer of Ulucak (Level VI), which encompasses red-painted floors but is devoid of clay objects (Çilingiroğlu and Çilingiroğlu 2012). The dataset forms the basis for the long-term study of the earliest farming traditions between core Neolithic areas in southwest Asia and southeastern Europe. Data tables include chronological data (Ulucak Level VI, V early, V late, and IV) and taxonomic identifications for ca. 22,000 vertebrae specimens (NISP); dental ageing data for sheep, goat, cattle and pig; fusion data for long bones; and linear standard osteometric data where possible. Details of the methods used in the collection of the data and the primary goals of the "Zooarchaeology of Neolithic Ulucak" project can be found in Çakırlar 2012a and 2012b.

Methodology
The dataset includes the vertebrate assemblages retrieved through hand-collection methods. Considerable amounts of marine, freshwater and terrestrial mollusks were also found during the excavations. Selective wet and dry sieving is applied at the Ulucak excavations. This archaeological material will be handled separately. In the present study, the post-cranial bones of sheep and goats were differentiated according to Zeder and Lapham's (2010) criteria. To identify the cranial bones, Boessneck et al.'s (1964) criteria were used. The identification of sheep and goat mandible teeth followed Zeder and Pilaar 2010. In order to avoid taxonomic confusion for the non-specialised reader and to overcome the difficulties of multiple binominal nomenclatures used by zoologists for domestic taxa, uninominal names are used to denominate domesticates (for example BOS) throughout the text, following Uerpmann (1993). Detailed information on the taphonomic features of the assemblage are provided in Çakırlar 2012a.

The post-cranial measurements are those described by von den Driesch (1976). Observations of tooth eruption and wear patterns are presented following Payne 1973 for sheep and goats and Grant 1982 for pig and cattle.

Potential Applications of Data
The dataset can be used to explore questions concerning the transition from foraging to producing economies in the Old World; Neolithisation processes of Anatolia and Europe; colonization of new biogeographies by humans; human-induced zoological introductions; environmental reconstructions of the Early Holocene; origins of secondary products exploitation etc.

Current Disposition of the Collections
The specimens from Neolithic Ulucak (Levels VI to IV) are housed at the Department of Protohistory and Near Eastern Archaeology of the Ege University (Izmir, Turkey).

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Open Context editors work with data contributors to annotate datasets to shared vocabularies, integrated and published data available for convenient mass-download in tabular (CSV) form via Github (https://github.com/ekansa/opencontext-eol-zooarch). The project "Biogeography of Early Domestic Animals using Linked Open Data (http://alexandriaarchive.org/projects/linked-data/)" was funded with a Computable Data Challenge award (http://eol.org/info/345) from the Encyclopedia of Life. The project published and integrated zooarchaeological data from 13 sites in Turkey, spanning the Epipaleolithic through the Bronze Age. Open Context editors made the integrated and published data in this study available for convenient mass-download in tabular (CSV) form via Github (https://github.com/ekansa/opencontext-eol-zooarch).

Image Credit
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