## 4000 YEARS OF RESILIENT PASTORALISM: THE PHYTOLITH ASSEMBLAGE FROM A MULTIPERIOD HABITATION SITE IN NORTHWESTERN MONGOLIA

<u>Juan José García-Granero</u><sup>1,2</sup>, Natalia Égüez<sup>3</sup>, Oula Seitsonen<sup>4</sup>, Nathan Wright<sup>5</sup>, Lee Broderick<sup>6</sup>, Jamsranjav Bayarshaikhan<sup>7</sup>, Jean-Luc Houle<sup>8</sup>

- <sup>1</sup> Spanish National Research Council (IMF-CSIC)
- <sup>2</sup> University of Oxford
- <sup>3</sup> Universidad de La Laguna
- <sup>4</sup> University of Oulu
- <sup>5</sup> University of New England
- <sup>6</sup> Oxford Archaeology
- <sup>7</sup> National Museum of Mongolia
- <sup>8</sup> Western Kentucky University

Currently, the development of mobile pastoralism and the chronology and nature of early pastoralist societies in Mongolia is known almost exclusively from burial and ritual contexts. Here we present the results of archaeological excavations carried out at a deeply stratified multiperiod habitation site situated in a protected valley draw in the Züünkhangai region of northwestern Mongolia, an area used by present-day pastoralist as a winter camp. Our data include artefacts, botanical and faunal remains, geological information and chronology that document the development of pastoralism in this region since the Early/Middle Bronze Age (c. 2000-1700 cal. BC). Our findings attest to the adaptive resilience of pastoralism for 4000 years, up to the present day, despite major changes in the sociopolitical, socioeconomic and environmental conditions through time. The phytolith assemblage is composed almost entirely of wild pooid grasses, which predominate in the Mongolian steppe. Interestingly, inflorescence phytoliths are extremely scarce throughout the site occupation sequence, suggesting that this area has been consistently used by herders as a winter camp for four millennia. Moreover, the ratio between Poaceae phytoliths fixed and sensitive to water conditions (short and long cells, respectively) suggests that during the earlier (Bronze Age) occupation of the site environmental conditions were drier than during later occupations (Iron Age and subsequent periods).

## Keywords

Phytoliths, Steppe, Seasonality, Herders, Resilience

Note/comment