INTRODUCTION

Durrington Walls is one of Britain’s largest Neolithic henge monuments. It was first excavated in 1966-67 (Wainwright and Longworth, 1971), and then again more recently as part of the Stonehenge Riverside project (Parker Pearson et al 2006; 2007). High proportions of Sus maxillary teeth and jaws have been uncovered during both excavations, but the tooth wear information from these teeth was essentially lost without the establishment of an appropriate recording system.

Grant (1982) is the most commonly used method for recording tooth wear on pig, but this applies only to the mandibular teeth. Bull and Payne (1982) laid out a different method which is applicable to both upper and lower teeth, but unfortunately the system lacks recording detail.

A modified version of Bull and Payne’s method was used for the recording of pig teeth from Durrington Walls during the 1990s, but this was only partly published (Albarella & Payne 2005). When excavation resumed in 2004 the need for an appropriate system for recording upper pig teeth became clear.

The aim of this project was to lay out a modified and expanded version of the system used during the 1990s, which is applicable to mandibular and maxillary jaws, and apply it to the new Durrington Walls material, in order to study seasonality at the site, and to assess its usability for continued recording at Durrington Walls, as well as on other sites.

METHODOLOGY

The tooth is split into a number of pillars

- ‘cusp’
- ‘pillar’

/’ signifies that tooth pillars are separated by an enamel bridge

1 signifies that tooth pillars are joined by dentine exposure

Codes

M1/M2/M3/dP4

1 No dentine exposure - enamel wear only

2 Dentine exposed as one or more small unconnected area(s) on the occlusal surface

3 Dentine exposed as a single area occupying most of the occlusal surface

4 Enamel on part or all of the pillar edge has worn away

Mandibular P4

1 No dentine exposure - enamel wear only

2 Dentine exposed but broken by enamel into more than one area

3 Dentine exposed and unbroken by enamel, creating one larger area of exposure

Maxillary P4

1 No dentine exposure - enamel wear only

2 Dentine exposed on buccal side of tooth only

3 Dentine exposed on both buccal and lingual sides of tooth

Seasonality

Seasonality was investigated further by comparing wear patterns to those from jaws of known ages, recorded at the museum for the study of domestic animals in Halle, Germany.

The results indicate two peaks of killing, in the first winter and second summer. In midden context 593 (where more maxillae than mandibles are represented) first winter killing was especially evident. Second summer killing is more prominent in non-593 contexts.

In all contexts, maxillary results show a peak of killing during the first winter.

RESULTS—Application of the new methodology

Age at death

Results show a killing peak of immature animals. Subadult animals would be expected to provide more meat. If hunting activity was taking place, animals may be killed at a younger age after being fattened over the autumn.

Stonehenge and Durrington Walls

Durrington Walls’ southern circle is aligned to the midwinter sunrise, complementing the alignment of the Stonehenge avenue and stone circle towards the midwinter sunset.

The presence of midwinter feasting provides more evidence of the relationship between the two sites.

CONCLUSIONS

Activity on site

First winter killing could be associated with the feasting activity proposed for the site by Albarella & Serjeantson (2002). The high proportion of maxillae deposited in context 593 suggests that cranial remains were being differentially deposited, and may have had some special association with feasting.

Non-593 contexts show a larger spread of killing across the seasons, suggesting that these contexts may contain remains not related to feasting. This suggests that both ritual and domestic activity was taking place on site.

Potential of the method

The predominance of maxillary teeth made it necessary to establish a new wear recording system. This has allowed us to produce valuable new information that would have been missed had we relied only on mandibular teeth. Therefore, this methodology will continue to be used for the recording of the Durrington Walls material and may also have a potential for other sites.

References


Ervynck, A (1997) Detailed recording of tooth wear (Grat, 1982) as an evaluation of the seasonal slaughter activity of pigs on farms, and in archaeological remains. Antiquity, 68, 617-629


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