DEER PARKS AND RECREATION

ZOOARCHAEOLOGICAL EVIDENCE FROM THE EARLS OF ARUNDEL HUNTING LODGE IN DOWNLEY (WEST SUSSEX, UK)

Downley Deer Park

The deer park at Downley is one of many medieval parks known from the county of West Sussex, in southern England. The park was constructed for and belonged to the Earls of Arundel and their heirs, the Dukes of Norfolk, during their period of use. No licence to impark has yet been discovered but documentary evidence suggests that this must have happened between 1272 and 1331. Correspondence between the 10th and 11th Earls of Arundel and high-status figures such as King Henry VIII, Wolsey and Thomas Cromwell, maps and documentary evidence describing the lodge and its eventual ruins, together with archaeological evidence, all attested to the presence of a substantial lodge building.

Downley deer park is located 8km north of Chichester and situated on the chalk hills of South Downs. The park perimeter measures 6.8km and covers an area of 261.7ha. The 2014 excavations were carried out in an area of grassland, designated as archaeological set-aside, where no invasive agricultural works may be undertaken. Some further trenches were located in a strip of game cover to the south of the set-aside in an attempt to assess the parameters of the lodge site. A substantial lodge building was proven within the pale, the features associated with the lodge contained various archaeological and environmental remains, mainly from trenches 5, 11 and 14a & 14b.

### Zooarchaeological Evidence

The first season of excavation at Downley produced a collection of 3,493 mammal remains, from which only 5.6% correspond to tooth elements. Trench 5 is the major contributor to the assemblage (39.6%), where a circular structure of about 2 metres deep was found and completely excavated on its NW side. Overall, large mammals represent 5.5% of the assemblage. Conversely, small mammals are the best represented (32.4%). Sheep/goat and pig are the most frequent amongst their animal size group and a total of 10 dog remains (0.3%) were recovered. The latter are, most probably, responsible for the carnivore marks found on 2.1% of the assemblage with a total of 32 punctures and 43 pitting marks observed. Very small animals represent 10.3% of the assemblage and are chiefly composed by rabbit/hare and cat. Even though medium size mammals are not the best represented group, deer is clearly the most abundant animal on site (13.2%), with particular relevance to fallow deer (*Dama dama*).

Fallow deer represents 2.3% of the overall assemblage, but more remains of this species might be diluted among the large amount of non-identifiable cervidae bones. Based on long bone fusion and teeth wear stages, most fallow deer are adult individuals. Body part representation shows antlers, humerri and metatarsals as the most frequent skeletal elements, whereas pelvis, femur and tibiae are absent from the record. To be noted that some of the antlers identified have not been naturally shed and still show part of the deer’s skull attached. In terms of body sides, the left side is better represented (23 remains) than the right side (15 remains). To sum up, fallow deer evidence confirms that animals were being hunted and dismembered on site probably following a ritualised manner. These preliminary results also suggest that this is a low-status assemblage, since the hindlimbs (femur and tibiae) are completely absent possibly indicating that the noblemen took their deer meat share home; whereas the forelimbs are very well represented, mainly by left scapula and humeri, traditionally given to thearker inhabiting the lodge as his hunting fee.

### Table 1 - Downley mammal assemblage quantification

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**LARGE MAMMAL**

*Equus caballus* 9 0.3 1 2.9 1 4.3

*BoVIDS* 69 2.0 4 11.8 2.5 10.9

*Herdvirc* 3 0.1 0.0 0.0 0.0

Indeterminate 112 3.2 0.0 0.0 0.0

Sub-total 193 5.5 5.5 14.7 3.5 15.2

**MEDIUM MAMMAL**

*Crepusus capreifus* 2 0.1 1 2.9 0.5 2.2

*Dama dama* 80 2.3 4 11.8 3.5 15.2

*Cervus elaphus* 2 0.1 1 2.9 0.5 2.2

*Cervid* 376 10.8 1 2.9 1 4.3

Sub-total 460 13.2 7 20.6 5.5 23.8

**SMALL MAMMAL**

*Odocoileus hemionus* 35 1.0 4 11.8 2.5 10.9

*Caprid* 49 1.4 4 11.8 3 13.0

*Herdvirc* 1 0.0 0.0 0.0 0.0

*Streps* 67 1.9 4 11.8 3 13.0

*Canis falaris* 7 0.2 2 5.9 1 4.3

*Canis* 3 0.1 1 2.9 0.5 2.2

Indeterminate 968 27.7 9 0.0 0.0 0.0

Sub-total 1130 32.4 15 44.1 10 43.5

**VERY SMALL MAMMAL**

*Herdvirc* 21 0.6 0.0 0.0 0.0

Indeterminate 815 23.3 0.0 0.0 0.0

Sub-total 836 23.9 9 0.0 0.0 0.0

**VERY SMALL MAMMAL**

*Crenogaster auratus* 24 0.7 2 5.9 1.5 6.5

*Leporid* 18 0.5 4 11.8 2 8.7

*Felis sp.* 2 0.1 1 2.9 0.5 2.2

Indeterminate 316 9.0 0.0 0.0 0.0

Sub-total 360 10.3 7 20.6 4 17.4

Indeterminate 514 14.7 0.0 0.0 0.0

**TOTAL**

3493 100.0 34 100.0 23 100.0

**Fig. 1 - Downley deer park location in southern England. Location of the branches opened during the first session of excavation in 2014. All branches in grassland are 1.5m x 10m; trenches 8, 12 and 15 in the game strip are 1.5m x 3m. Image adapted from Roberts 2014:117.**

**Fig. 2 - Fallow deer (*Dama dama*) left mandible showing M1, M2 and M3 with 20-33 months old recovered from trench 5, context 7.**

**Fig. 3 - Juvenile pig (*Sus sp.*) left mandible showing dP2, dP3, dP4 and M1 recovered from trench 5, context 7.**

**Fig. 4 - Fallow deer (*Dama dama*) left mandible showing M1, M2 and M3 with 20-33 months old recovered from trench 5, context 7.**

**Fig. 5 - Juvenile pig (*Sus sp.*) left mandible showing dP2, dP3, dP4 and M1 recovered from trench 5, context 4.**

**Fig. 6 - Dog (*Canis familiaris*) left mandible showing P1, P2, P3, P4, recovered from trench 5, context 4.**

**Fig. 7 - Caprids left calcaneum heavily pitted due to carnivore activity. Recovered from trench 5, context 7.**

**Fig. 8 - Dog (*Canis familiaris*) left mandible showing P1, P2, P3, P4, recovered from trench 5, context 4.**

**Fig. 9 - Juvenile pig (*Sus sp.*) left mandible showing dP2, dP3, dP4 and M1 recovered from trench 5, context 7.**

**Fig. 10 - Dog (*Canis familiaris*) left mandible showing P1, P2, P3, P4, recovered from trench 5, context 4.**

**Fig. 11 - Juvenile pig (*Sus sp.*) left mandible showing dP2, dP3, dP4 and M1 recovered from trench 5, context 7.**

**Fig. 12 - Dog (*Canis familiaris*) left mandible showing P1, P2, P3, P4, recovered from trench 5, context 4.**

**Fig. 13 - Juvenile pig (*Sus sp.*) left mandible showing dP2, dP3, dP4 and M1 recovered from trench 5, context 7.**

**Fig. 14 - Dog (*Canis familiaris*) left mandible showing P1, P2, P3, P4, recovered from trench 5, context 4.**