

# 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 license 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 6.6km 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.



Fig. 1 - Downley deer park location in southern England. Location of the trenches opened during the first season of excavation in 2014. All trenches 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.

	NISP	%NISP	MNI	%MNI	MAU	%MAU
<b>LARGE MAMMAL</b>						
<i>Equus caballus</i>	9	0.3	1	2.9	1	4.3
<i>Bos taurus</i>	69	2.0	4	11.8	2.5	10.9
Herbivore	3	0.1	0	0.0	0.0	0.0
Indeterminate	112	3.2	0	0.0	0.0	0.0
<b>Sub-total</b>	<b>193</b>	<b>5.5</b>	<b>5</b>	<b>14.7</b>	<b>3.5</b>	<b>15.2</b>
<b>MEDIUM MAMMAL</b>						
<i>Capreolus capreolus</i>	2	0.1	1	2.9	0.5	2.2
<i>Dama dama</i>	80	2.3	4	11.8	3.5	15.2
<i>Cervus elaphus</i>	2	0.1	1	2.9	0.5	2.2
Cervidae	376	10.8	1	2.9	1	4.3
<b>Sub-total</b>	<b>460</b>	<b>13.2</b>	<b>7</b>	<b>20.6</b>	<b>5.5</b>	<b>23.9</b>
<b>SMALL MAMMAL</b>						
<i>Ovis</i> sp.	35	1.0	4	11.8	2.5	10.9
Capridae	49	1.4	4	11.8	3	13.0
Herbivore	1	0.0	0	0.0	0	0.0
<i>Sus</i> sp.	67	1.9	4	11.8	3	13.0
<i>Canis familiaris</i>	7	0.2	2	5.9	1	4.3
Canidae	3	0.1	1	2.9	0.5	2.2
Indeterminate	968	27.7	0	0.0	0	0.0
<b>Sub-total</b>	<b>1130</b>	<b>32.4</b>	<b>15</b>	<b>44.1</b>	<b>10</b>	<b>43.5</b>
<b>&gt;VERY SMALL MAMMAL</b>						
Herbivore	21	0.6	0	0.0	0	0.0
Indeterminate	815	23.3	0	0.0	0	0.0
<b>Sub-total</b>	<b>836</b>	<b>23.9</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>
<b>VERY SMALL MAMMAL</b>						
<i>Oryctolagus cuniculus</i>	24	0.7	2	5.9	1.5	6.5
Leporidae	18	0.5	4	11.8	2	8.7
<i>Felis</i> sp.	2	0.1	1	2.9	0.5	2.2
Indeterminate	316	9.0	0	0.0	0	0.0
<b>Sub-total</b>	<b>360</b>	<b>10.3</b>	<b>7</b>	<b>20.6</b>	<b>4</b>	<b>17.4</b>
<b>INDETERMINATE</b>						
Indeterminate	514	14.7	0	0.0	0	0.0
<b>TOTAL</b>	<b>3493</b>	<b>100.0</b>	<b>34</b>	<b>100.0</b>	<b>23</b>	<b>100.0</b>

Tab. 1 - Downley mammal assemblage quantification.. NISP = Number of Identified Specimens. MNI = Minimum Number of Individuals. MAU = Minimum Animal Units



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

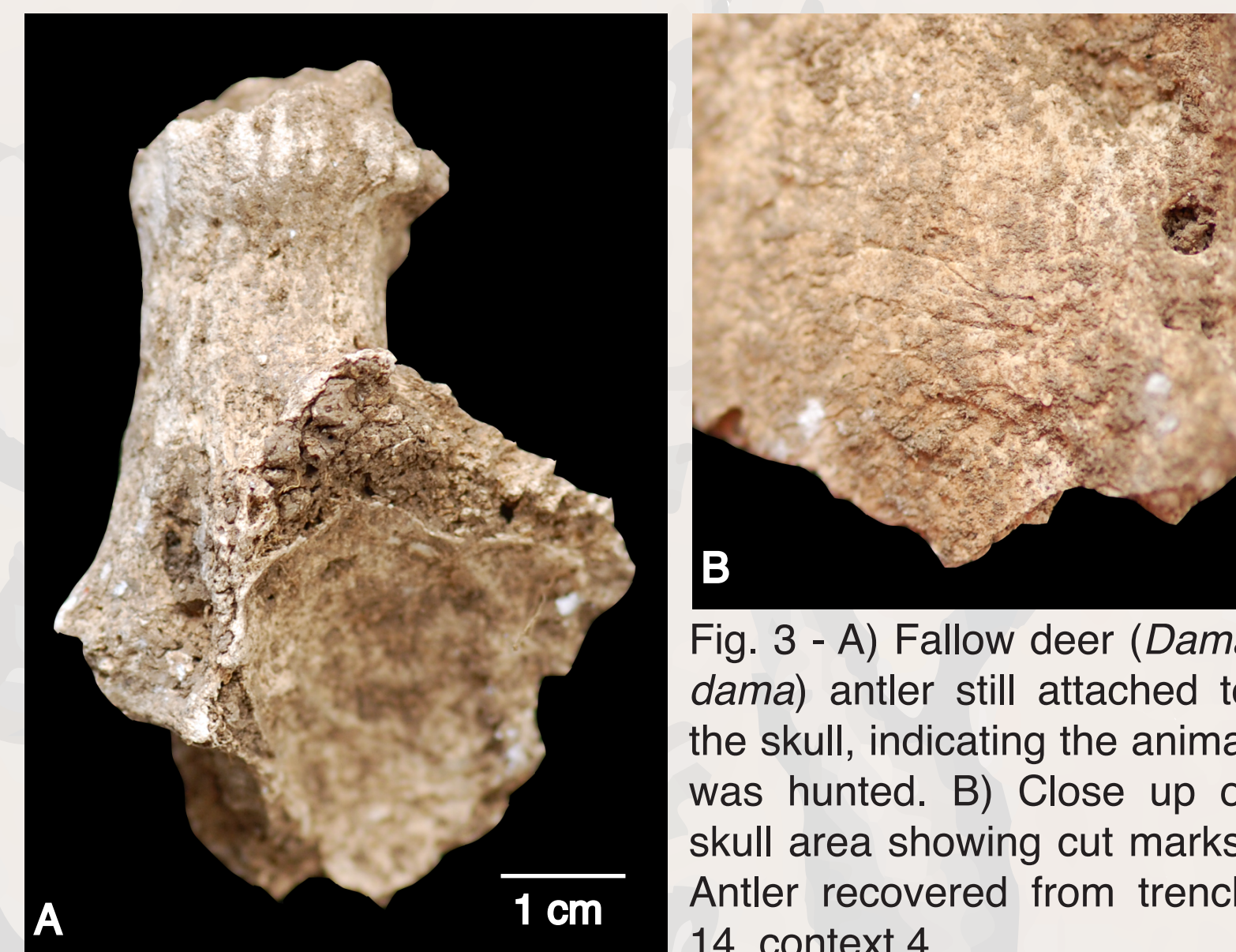


Fig. 3 - A) Fallow deer (*Dama dama*) antler still attached to the skull, indicating the animal was hunted. B) Close up of skull area showing cut marks. Antler recovered from trench 14, context 4.



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

### Zooarchaeological Evidence

The first season of excavation at Downley produced a collection of 3,493 mammal remains, from which only 5.6% correspond to teeth 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, humeri and metatarsals as the most frequent skeletal elements, whereas pelves, femuri 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 (femuri 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 scapuli and humeri, traditionally given to the parker inhabiting the lodge as his hunting fee.



Fig. 5 - Fallow deer (*Dama dama*) body part representation showing left and right sides, suggesting a low-status accumulation due to low representation of hindlimbs and high representation of left shoulder elements.



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



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