Berks. Archaeological Journal, Vol. 68
Printed in Great Britain

FAUNA OF AN AREA OF MESOLITHIC OCCUPATION IN THE KENNET VALLEY CONSIDERED IN RELATION TO CONTEMPORARY EATING HABITS

H. H. CARTER

Froom[1] has recently published an account of the flint artefacts from a site at Wawcott, near Kintbury, Berkshire, together with a survey of other Mesolithic sites in the same area, which is close to Wymer's[2] well-known early Mesolithic site at Thatcham in the Kennet Valley.[3] In addition to the large amounts of worked flint obtained from Wawcott and amply discussed by Froom, there is a quantity of mammalian bone, less voluminous but capable of yielding considerable information on the diet, and by inference on the daily habits, of the human population. The proportions of larger animal species present are rather similar to those from Thatcham and Star Carr,[4] and the early phase at Wawcott is approximately contemporary with these two sites[5] and has yielded most of the bone.

Numbers of identified bones are compared in the following table:

	Thatcham	Star Carr	Sites XV, XXX (early)	Wawcott Site IV (middle)	Sites XXIII, XXVI (late)
Pig—*Sus scrofa* L.	90+	26	23	7	nil
Elk—*Alces alces* (L.)	6	231	11	1	nil
Red Deer—*Cervus elaphus* L.	60+	672	15	16	3
Roe Deer—*Capreolus capreolus* (L.)	20	156	5	nil	nil
Wild Cattle—*Bos primigenius* Bojanus	13	169	21	11	7

[1] F. R. Froom, *Berks Arch. J.* 66, 11–22 *and* ibid 23–24—see also CBA 9 Newsletter 4.

[2] J. J. Wymer, *Proc. Prehist. Soc.* XXVIII, 13 (1962).

[3] Grid references for faunal sites at Wawcott are Site IV SU404679, Site XII 408675, Site XV 418672, Site XXIII 410674, Site XXVI 403679, Site XXX 413676, Thatcham is at SU502668 to 504667.

[4] J. G. D. Clark et al., *Excavations at Star Carr:* Cambridge: 1954.

[5] ^{14}C dates for the three sites are as follows:

Thatcham: range from 8415 b.c.±170 to 7530 b.c.±160, main activity c. 7800 to 7500. (the date of 6140 b.c.±180 is suspect.) Churchill, D. M. Proc. Prehist Soc. XXVIII 14, 1962. BM65 Site II; Q658 and 659 Site III; Q650, 651, 652, 677 Site V.

Star Carr: 7607 b.c.±210 (Q14) and 7358 b.c.±350 (C_{353}) Clark, op. cit.

Wawcott (Late): 4170 b.c.±134 (BM767) Froom, *British Arch. Reports* 27, 1976, Site III; 3310 b.c.±130 (BM449) Froom, *Berks Arch. Journal* 66, 1971, Site I; 3910 b.c.±113 (BM826) Froom, in litt., Site XXIII. The dating of the Wawcott sites relative to one another is as suggested by Froom in litt.

Horse—*Equus caballus* L.—is represented by a few specimens both at Thatcham and Wawcott, but at both sites the circumstances are such that the species could well be intrusive. The habitat in Mesolithic times in the Kennet valley was marshy woodland unsuitable for horses. Thatcham and Star Carr also yielded many smaller mammals, of which only beaver—*Castor fiber* L.—is present in any quantity. The only comparable find from Wawcott is a single bone of badger—*Meles meles* (L.)—which also occurs at Thatcham and Star Carr.

To assess the relative significance of different species as articles of food it is necessary first to make some assumption relating the number of bones recovered to the total number of animals eaten. It is usual to adopt either the "Minimum Number" or the "Fragments" hypothesis. The latter assumes that each bone fragment represents one complete animal, due allowance being made for fragments which actually fit together and for cases where several bones from a single region of the body coexist at one spot and were probably all part of the same individual.

The fragments hypothesis is in my opinion the most suitable one to use when a site has not been completely stripped and the bone available is only a sample of a much larger quantity of which most remains buried, as is the case at the Wawcott sites. The number of individuals of each species must then be multiplied by a factor for the body weight of that species in order to obtain an estimate of the amount of meat which it afforded. The errors introduced by this calculation are virtually constant for a given period and so of little importance when sites of similar age are compared. The factors used in the present paper are estimates of total body weight in kilograms[6] and are set out, together with the proportions of different species as percentages of total meat consumed, in the following table:

		Thatcham %	Star Carr %	Wawcott (early) %	Wawcott (middle)	Wawcott (late)
Pig	150	c. 40	1	13	trivial	
Elk	350	5	24	14	trivial	
Red Deer	150	c. 27	31	8	small amount	small amount
Roe Deer	20	1	1	0·4		
Wild Cattle	850	c. 25	43	65	predominant	predominant
Beaver	15	0·8	0·3			
Birds	2·5	0·05	0·01			
Fish	10	0·05				

[6] Klaus König, "Wilderbende Saugetiere Europas" quotes the following weight ranges for present-day European fauna:

Bison	800–900 kg	(Bos primigenius is about the same size and build)
Elk	320–450 kg	
Red Deer	125–220 kg	(British woodland examples are on the light side)
Roe Deer	16– 27 kg	
Pig	50–350 kg	(The Wawcott bones are all clearly from the lower part of this range)

The sample from the later Wawcott sites is small, and the results obtained from it are therefore not expressed in numerical form, but I have included them for completeness and because they at least suggest a continuance of the trend indicated by the earlier sites.

Several points of interest emerge from this breakdown. The first is the great range of variation in the amount of pig remains, which at Thatcham and early Wawcott is the most numerous species, but at Star Carr is heavily outnumbered by deer and cattle. The proportion of cattle to deer (elk, red deer and roe) rises throughout the sequence, as does the proportion of elk to other deer initially, its subsequent decline reflecting the rapid progress of this animal towards extinction, which took place before the end of the Mesolithic. This trend, coupled with the disappearance of pig, roe, beaver, birds and fish, betokens an increasing dependence on the largest members of the fauna which was to end in extinction for one and domestication for another. At the same time it indicates the abandonment of marsh and riverside as a hunting ground in favour of deciduous forest. Churchill's sections at Thatcham (loc. cit.) show a change from open lake to peat bog which, if it occurred generally throughout the Kennet valley, must have made the waterside difficult of access and may well have encouraged a diversion of effort to drier areas. It is clear however from the figures given here that the aquatic fauna were never of much importance as an article of diet at any of these inland sites, many statements to the contrary notwithstanding, and that a generous allowance for possible preferential destruction of small bones (particularly those of fish) can be made without much affecting the picture of cattle replacing deer and pig as the main source of meat, with fishing and fowling relegated to the field of sporting activities.

Domestic animals vary greatly in weight according to breed, but reasonable figures for primitive sheep and goats would seem to be about 40 kg and for cattle 400 ± 100 kg depending on period, Iron Age beasts being the smallest.

Chaplin's[7] dressed weights of 135 kg for cattle and 22 kg for pig presumably refer to the carcase after removal of head, feet, hide and viscera, and are not to be confused with clean weights after removal of viscera only.

[7] *The study of Animal Bones from Archaeological Sites:* Seminar Press; 1971, p. 134.