

Animal Bones from an Early Bronze Age Midden Layer at Torslev, Northern Jutland

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INTRODUCTION

There are to date only a few known samples from Denmark of animal bones from settlements dating to the Early Bronze Age. This is a natural consequence of both the relatively small number of sites from the period which has been excavated, and of the preference for siting such settlements on well drained, sandy subsoil. The latter provides generally unfavorable conditions for the preservation of organic refuse. In the collections at the Zoological Museum in Copenhagen there are only four such finds, including that from Torslev. All of them consist of rather small numbers of bone fragments (1).

In 1982, Aalborg Historical Museum excavated a midden layer preserved beneath a small burial mound, which was situated on a hilly moraine a short distance from the Limfjord, and about 30 km west of Ålborg (Johansen 1985; Rasmussen 1995, this volume). The layer is presumed to have accumulated over a rather short period of time during the first half of the Early Bronze Age. It lay over a sandy subsoil and contained typical settlement debris such as pottery, flint, animal bones, oyster shells and charcoal. The preservation of the animal bones was partly due to the presence of oyster shells in the southern part of the deposit. Outside that area the bones had more or less decomposed (Johansen 1985:118).

MATERIAL

In all, 112 animal bone fragments, with a total weight of 342 grams, were retrieved from the midden. Only one fragment, an *os anale* of a flatfish, belongs to the marine fauna (2). Of the remaining 111 mammalian bones, 42 have been identified either to species (20 fragments) or two alternative genera (22 fragments), see Table 1. The

identified bones include the following anatomical parts for each animal group:

Dog

A canine from right lower jaw.

Pig

The root of a milk tooth incisor from lower jaw; a rib fragment; greater part of a right ulna; a small fragment of fibula. – Minimum number of individuals: 1.

Red deer

Four antler fragments; a molar from upper, left jaw; a diaphysis fragment of a metapodium. – Minimum number of individuals: 1.

Sheep/goat

A skull fragment (piece of temporal bone); an upper right molar (fragmented); an incisor; one left and two right molars from lower jaw (none of them complete); two rib fragments; a fragment of ulna; lateral half of the proximal end of a right metacarpus; a diaphysis fragment of metacarpus; a diaphysis fragment of femur; middle part of the shaft of a right tibia; three diaphysis fragments of tibia; a fragment of the proximal end of a left metatarsus; middle part of the shaft of metatarsus; a diaphysis fragment of metatarsus; three diaphysis fragments of metapodials. – Minimum number of individuals: 2.

Cattle

Fragments of a molar from upper jaw; fragment of a milk tooth from lower jaw (dp4); a left molar from lower jaw (M1/M2) (from a juvenile); fragment of sac-

rum; middle part of left ulna; lateral part of the proximal end of a left metacarpus; a diaphysis fragment of metacarpus; middle part of the diaphysis of left tibia (from a juvenile); a diaphysis fragment of a right tibia; distal part of a proximal phalanx. – Minimum number of individuals: 2.

The majority of the recovered bones has an orange-grey or orange-brown patina, and their state of preservation is fairly good. Ten fragments have either been burned or otherwise damaged by fire, while a single bone has been gnawed by dogs. Seven fragments show traces of having been deliberately worked, these include:

No. 946 X 97 (see Johansen 1985, Fig. 4, middle): Section of a tine of red deer antler (L = 8,0 cm) with an old breakage towards the root, at an 1,8 cm wide, cylindrical shafthole, half of which is preserved. At the tip the tine has been worked from two sides to form a narrow, vertical edge, which is now missing (partly recent breakage).

No. 946 X 102 (see Johansen 1985, Fig. 4, top): Outer part of a tine of red deer antler (L = 7,2 cm), with smoothed surface, and an old, irregular fracture towards the root. The tip has been worked from two sides, probably by grinding, to form a narrow edge, the point of which is broken. It is likely, that there has been a shafthole on the missing part of the tine.

Implements of this type occur now and then in South Scandinavian settlements dating to the Late Bronze Age (e.g. Stjernquist 1969:129, Fig. 48). In particular, there is a rich bone find from Ångdala at Sallerup, near Malmø, which includes several antler tines that have been worked in exactly the same way (unpublished) (3). As single stray finds, this type may easily be confused with the so-called antler “chisels” belonging to the Ertebølle Culture (Andersen 1981:12).

No. 946 X 88 (Fig. 1): Middle section of the diaphysis of a right tibia of sheep or goat (L = 6,4 cm) sawn off distally and with irregular breakage proximally. A ring of cutmarks, perhaps stemming from incipient sawing, encircles the diaphysis just below the breakage. Furthermore, a line of cutmarks is seen running lengthwise, and finer marks on the surface show that the bone has been smoothed. At the distal end the marrow cavity has



Fig. 1. Worked middle section of the diaphysis of a right tibia of sheep or goat showing cutmarks. Photo: Gert Brovad. 1:1.



Fig. 2. Distal end of the bone shown in Fig. 1. The marrow cavity has been enlarged by drilling. Photo: Gert Brovad. C. 1:1.

been enlarged a little by drilling (see Fig. 2). The upper third has been damaged by fire, indicating that the bone may have been used as a mouthpiece for a kind of bellows.

A splinter of a long bone (L = 9,9 cm) from an animal of the size of a cow has been shaped from two sides into a blunt point (no. 946 X 10). A long bone fragment (L = 3,3 cm), probably from either a sheep or goat, forms part of a carefully made awl or needle (no. 946 X 2). A small fragment of metatarsus (L = 2,2 cm), also belonging to a small ruminant, has been split longitudinally through the natural furrow that runs along the diaphysis (no. 946 X 96). Finally, this artefact group also includes a further small fragment of worked antler (no. 946 X 96).

CONCLUSION

In spite of the small size of this bone sample, it gives a glimpse of a varied faunal exploitation. The inhabitants of the Torslev site kept a range of livestock, that included the most common domesticated animals. Compared to bone collections from the Late Bronze Age, only the horse is missing. Yet this animal may very well have been a member of the domestic livestock, as its

remains occur on other sites dating to the Early Bronze Age, for instance Bjerre, near Hanstholm, in North West Jutland (1). Red deer were hunted in the surrounding countryside, and the apparently frequent use of their antlers for tool production indicates harvesting of the yearly shed antlers. Fishing took place in the Limfjord, as well as the gathering of shell fish (oysters), which seems to have been a common activity.

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NOTES

- 1 In addition to Torslev, the following three finds dating to the Early Bronze Age have produced animal bones: Bjerre (Thisted Museum, file no. 2728) (Bech 1991); Rumohrsgård (Haderslev Museum file no. 1659); Vester Kærby (Fyns Stiftsmuseum file no. 181/72).
- 2 Identified by Inge Bødger Enghoff, The Zoological Museum, University of Copenhagen.
- 3 The site was excavated by Ulf Säfvestad, Malmö Museum (file no. MHM 6120).

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PISCES:					
Flatfish, <i>Heterosomata</i>	Fragments				
	1				
MAMMALIA:		Fragments	(Pct.)	Weight	MNI
Dog, <i>Canis familiaris</i>	1	(3)	2 g	1	
Pig, <i>Sus domesticus</i>	4	(10)	20 g	1	
Red deer, <i>Cervus elaphus</i>	2	(5)	22 g	1	
Sheep/goat, <i>Ovis aries/Capra hircus</i>	22	(56)	51 g	2	
Cattle, <i>Bos taurus</i>	10	(26)	128 g	2	
Sum	39	(100)	223 g		
Antler pieces:					
Red deer, <i>Cervus elaphus</i>	3		50 g		
Unidentified	2		4 g		
Unidentified mammalian bones					
	66		65 g		
Sum	110		342 g		

Table 1. Animal bones from Torslev.