

THE VIG BULL

New information on the final hunt

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A re-examination of the famous Preboreal *Bos primigenius* skeleton from Vig, Denmark, revealed new evidence for the animal's mode of death. Besides the injuries described earlier, there are signs that the bull was pierced through both shoulderblades. The diameter of the holes indicates that the weapon was possibly a spear. The fractures are compared with that in a Boreal *Bos* shoulderblade from Grænge (Andersen & Møller, 1946).

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During the preparation of a forthcoming article on Mesolithic hunting in Denmark based on traces such as "shotholes" on bones and injuries containing flint, the *Bos primigenius* skeleton from Vig, Odsherred, Sjælland, was re-examined. This skeleton, dated to Preboreal time (Fredskild in Degerbøl, 1970), was described by Hartz & Winge (1906), who showed that flint fragments were embedded in the wounds in two different ribs, one healed and the other unhealed. This was interpreted to show that the animal was hunted at least twice.

The re-examination revealed that, in addition to these wounds, both shoulderblades also appear to have been pierced. Another group of fractures has developed subsequently due to recent drying out of the bone.

The Vig skeleton

While re-inspecting the old skeleton from Vig, experience with other bones showing traces after hunting led me to check the shoulderblades. In both of the blades fractures were found which resembled a fracture previously described as a shothole (Andersen & Møller, 1946, p. 8, fig. 5), in a shoulderblade of a Boreal *Bos* from the bog Grænge-mose.

Scapula sinistra

There is a rounded fracture (48×38.5 mm) in the centre of the shoulderblade (pl. 1 & 2). The inner side shows very characteristic fractures which

are more pronounced on the lower part, and thus allow one to estimate the direction of the course of the weapon. According to Rust (1943, pp. 136, 137, 140) and my own experiments on recent material, the side with bone splinters is the side from which the weapon has left the blade.

Scapula dextra

This blade contains a small, irregular hole (25×15 mm) in the centre. On the outer side the rim of the hole shows numerous scars from bone splinters. Most of these splinters occur on the lower posterior part of the hole, corresponding in position to the distribution in the left blade (pl. 3). The inner side shows a rather clear-cut rim indicating that the blow came from this side.

Discussion

The rounded shape of the two fractures and the mode of splintering of the bone indicate that the fractures do not derive from the desiccation of the blade. This is evident from a comparison with the kind of splintering which is due undoubtedly to drying in air, the effect of which can be seen on the same blade. The rim on the two sides of each blade, one side clear cut and the other with scars from splintering of the bone, are typical of a hole made

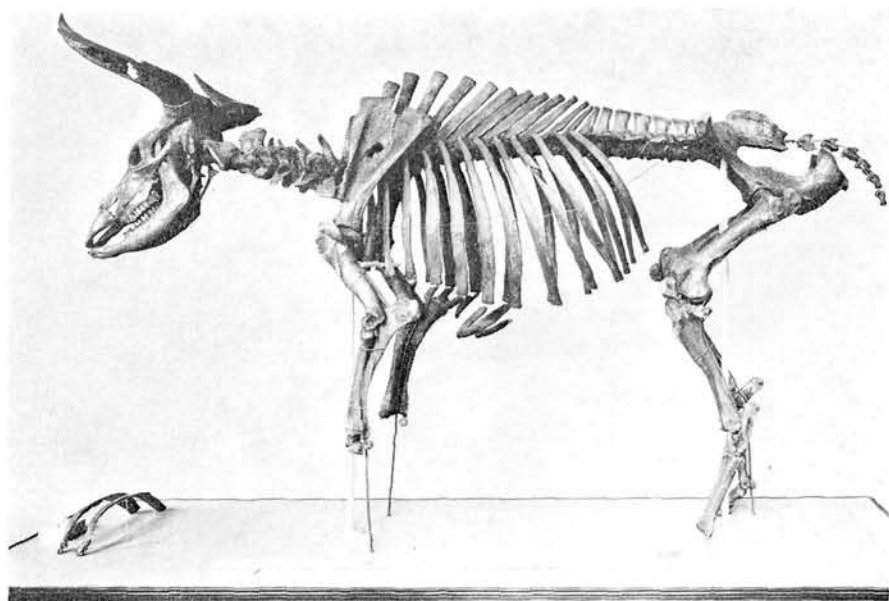


Fig. 1. The skeleton of the Vig urus. Its two ribs damaged by flint arrows are placed in front of the skeleton and the damage to the left shoulderblade is visible.

by piercing with some kind of weapon. A similar hole was described by Andersen (1946) on a shoulderblade from an urus dated to Boreal time (pl. 4). This blade was found together with other bones among which one humerus showed traces from marrow-splitting and other bones were gnawed by dogs (Degerbøl, 1970, p. 11).

The position and dimensions of the holes on the blade from Grænge (40×28.5 mm) and the left blade from Vig (48×38.5 mm) are comparable. But whereas the blow on the Vig blade came from the outside, the blade from Grænge shows that the blow has come from within, and as splintering is regularly arranged around the rim of the hole, the weapon must have passed through the body to strike the blade almost perpendicularly. The splintering on the Vig blade is more irregular, with the greater number of splinter scars on the lower posterior edge. This indicates that the course of the weapon was oblique and from slightly above and in front of the animal, passing through the body. There are no signs on the Vig skeleton to indicate that the hunters captured the bull, and it would seem most likely that it escaped its pursuers and died in the bog where it was found. The opposed position of the holes in the two blades indicates that they were probably made by a single blow. This is supported by the evidence for the direction of the entry of the stabbing weapon as interpreted from the mode of fracture in the edges of the holes. It would therefore seem that the implement penetrated the left blade, passed through the body just above the heart, and came to rest against or within the right blade in which it made the starlike fracture. This blade-shot would normally be reckoned to cause almost instant death. The tip of the weapon probably slipped back out of its lodgement in the neighbourhood of the right blade as the bull raised itself, which allowed the animal to make its final rush into the bog.

One may only guess as to the type of weapon used, but the dimensions of the holes would suggest that it was spear-like (Adam, 1951). The nature of the point of the spear is unknown but three possibilities may be considered: flint, antler (or bone), or wood hardened by fire. The last possibility can probably be ruled out as this material seems too weak to allow for such damage to two 4–5 mm thick, elastic plates of bone. On the other hand, no find of bone or flint spear-head has been recorded from the shoulder region, although three flint points were found "near the ribcage" (Hartz & Winge, 1906, p. 233).

Interpretations

It would seem therefore, that the holes in the two blades were produced by a single spear. However, one might doubt that a man is capable of throwing a spear right through the body of a bull, even if the animal were standing or kneeling quietly owing to total exhaustion from protracted hunting and

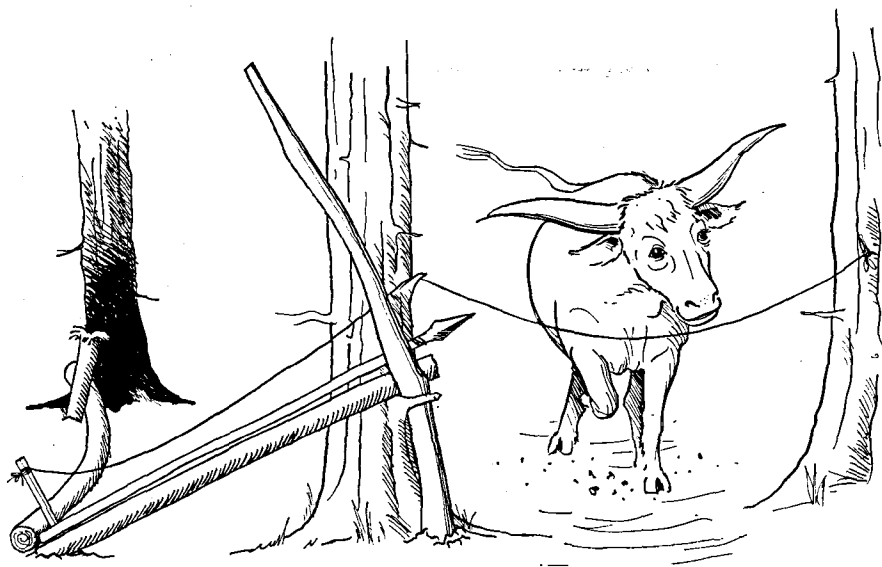


Fig. 2. A modern type of trap for elk, here adopted to the urus (modified after Ekman 1910). Drawn by Jens Olesen.

loss of blood. However, there are also other possibilities which may be taken into consideration.

The two holes might also have been made by two spears, the one entering the left blade from outside while the other entered the body just behind the left blade, penetrated the thorax and rammed the right blade on the inner side. Less strength would be required to force this second spear through the body without penetrating both blades, and it is likely to have passed through both lungs and heart.

In the case of a single spear the projecting force might have been increased with the use of a throwing stick, as is done today by Australian aborigines and eskimoes, or by the use of a trap with a mechanism for spear throwing. Ekman (1910, pp. 46–47) described such a modern trap (fig. 2) which would throw a spear accurately and with sufficient power to penetrate the body of a large animal and which could be adjusted to the size of the prey. However, from the facts at our disposal, it cannot be decided if such a trap was used.

As Hartz & Winge (1906, p. 232) showed, the Vig Bull was hunted on at least two occasions. The healed wound in the 9th rib shows that on an earlier occasion the bull escaped, while the unhealed wound on the 7th rib was sustained shortly before or during the final hunt. Hartz & Winge envisaged the bull escaping its hunting and seeking peace in the small forest lake.

The holes in the shoulderblades support this explanation since they show no sign of healing. The placing of the rim fractures and the discrepancy in the sizes of the two holes indicate that the bull received its death blow probably with a single spear which passed right through the body. With its last effort the animal succeeded in escaping the hunters and running a short distance into the lake where it was out of reach of its pursuers.

This constitutes an important addition to the meagre information we have on the use of spears in the Danish Mesolithic.

The possibility of a sacrifice to the gods should also be considered, but would appear unlikely since ritual marrow-splitting or bone arrangement have not been found in this case.

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Dansk sammendrag

Det af Hartz & Winge (1906) beskrevne urokseskelet fra Vig er blevet underkastet en fornyet undersøgelse. Det viste sig, at dyret har fået gennembrudt begge sine skulderblade på en karakteristisk måde, der lader formode, at det er foregået på én gang og at perforeringen skyldes, at dyret er blevet gennemboret af et spyd under jagt. Fra Hartz & Winge ved man, at dyret har et ulægt sår i det 7. ribben, oxen har altså været jaget kort før den døde, og det er naturligt at tænke sig, at man har givet den nådestødet med spyd, men at dyret har været i stand til at løbe de sidste meter til søen, hvor det blev fundet.

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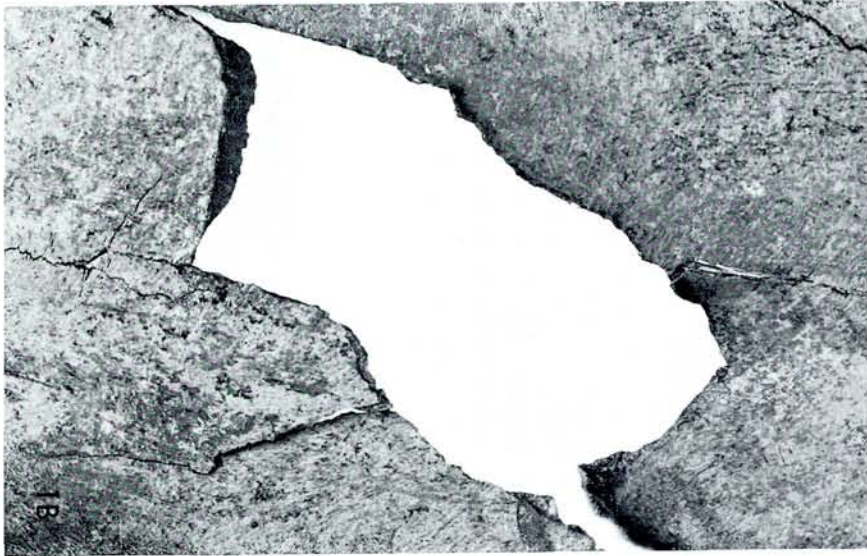
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Plate 1

Fig. 1A. Left shoulderblade of the *Vig urus*, outer side. Fig. 1B. The hole, showing the clean-cut, rounded rim and the fractures caused by drying out of the bone.



1A



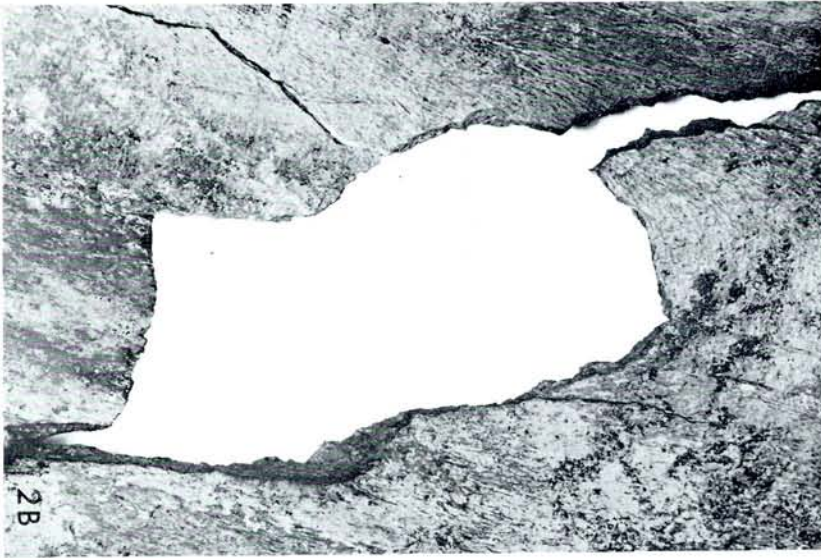
1B

Plate 2

Fig. 2A. Left shoulderblade of the Vig urus, inner side. Fig. 2B. The rim of the hole on this side shows numerous scars after splintering of the bone which were caused by the weapon when leaving the blade.



2A



2B

Plate 3

Fig. 3A. Right shoulderblade of the Vig urus, inner side. Fig. 3B. Enlargement of the hole, inner side, showing its irregular shape and rather clean-cut rim. Fig. 3C. Right shoulderblade of the Vig urus, outer side. Fig. 3D. Enlargement of the hole, outer side, showing the star-like fracture and the scars after splintering of the bone.

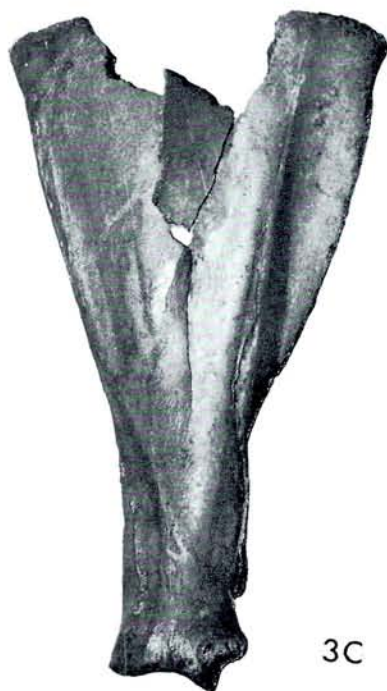


Plate 4

Fig. 4A. Left shoulderblade from an urus from Grænge-mose, outer side. Fig. 4B. Enlargement of the hole, showing the rim with numerous splinter scars. Fig. 4C. Inner side of the same. Fig. 4D. The hole from the inner side, showing clean-cut rim.

