

PLATES 1-20



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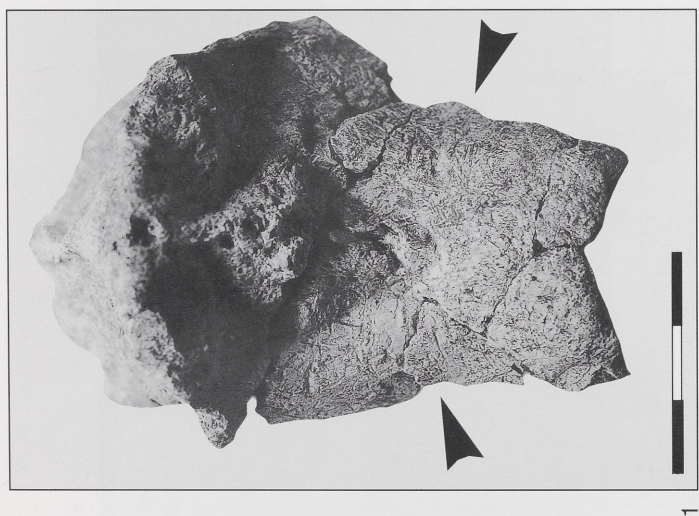


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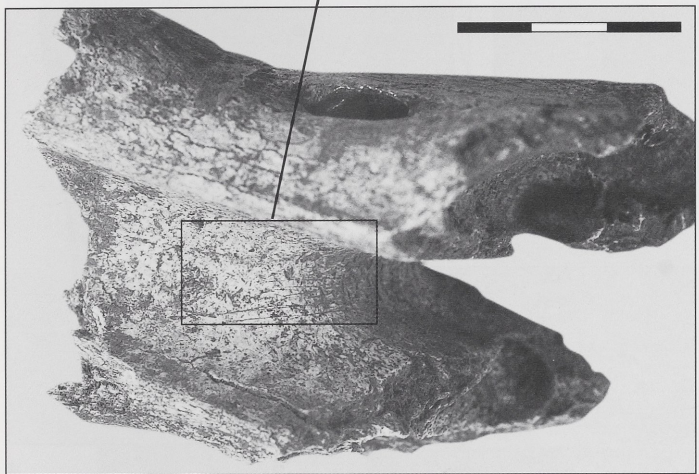
1 View of the southern cliff of the »Roche de Solutré«. – 2 Aerial view of the »Roche de Solutré« taken from the west and looking towards the Saône Valley. The white arrow marks the site of the excavations, enclosed today by a security fence. On the right edge of the photograph is the village of Solutré.



1 View of the sector P16 site during excavation. The baulks are still in place; the first 5-10cms. of soil have been removed. —
2 View of the main concentration of bone in the channel. Note the orientation of long bones (bottom right) from NW-SE in the channel.



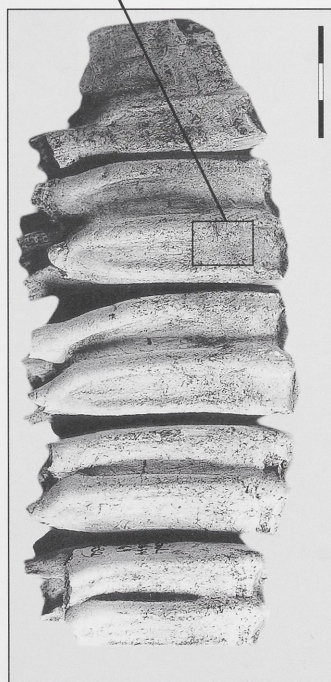
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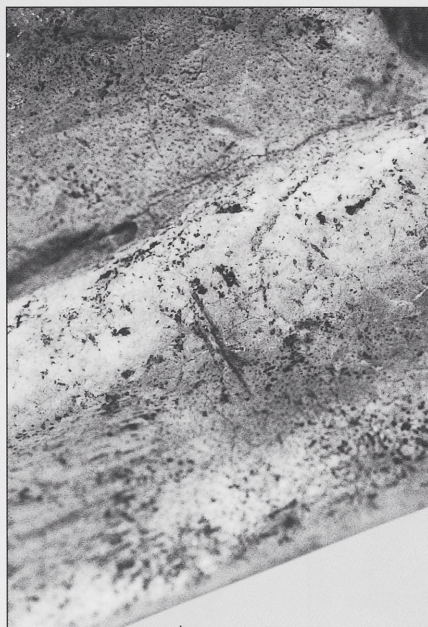
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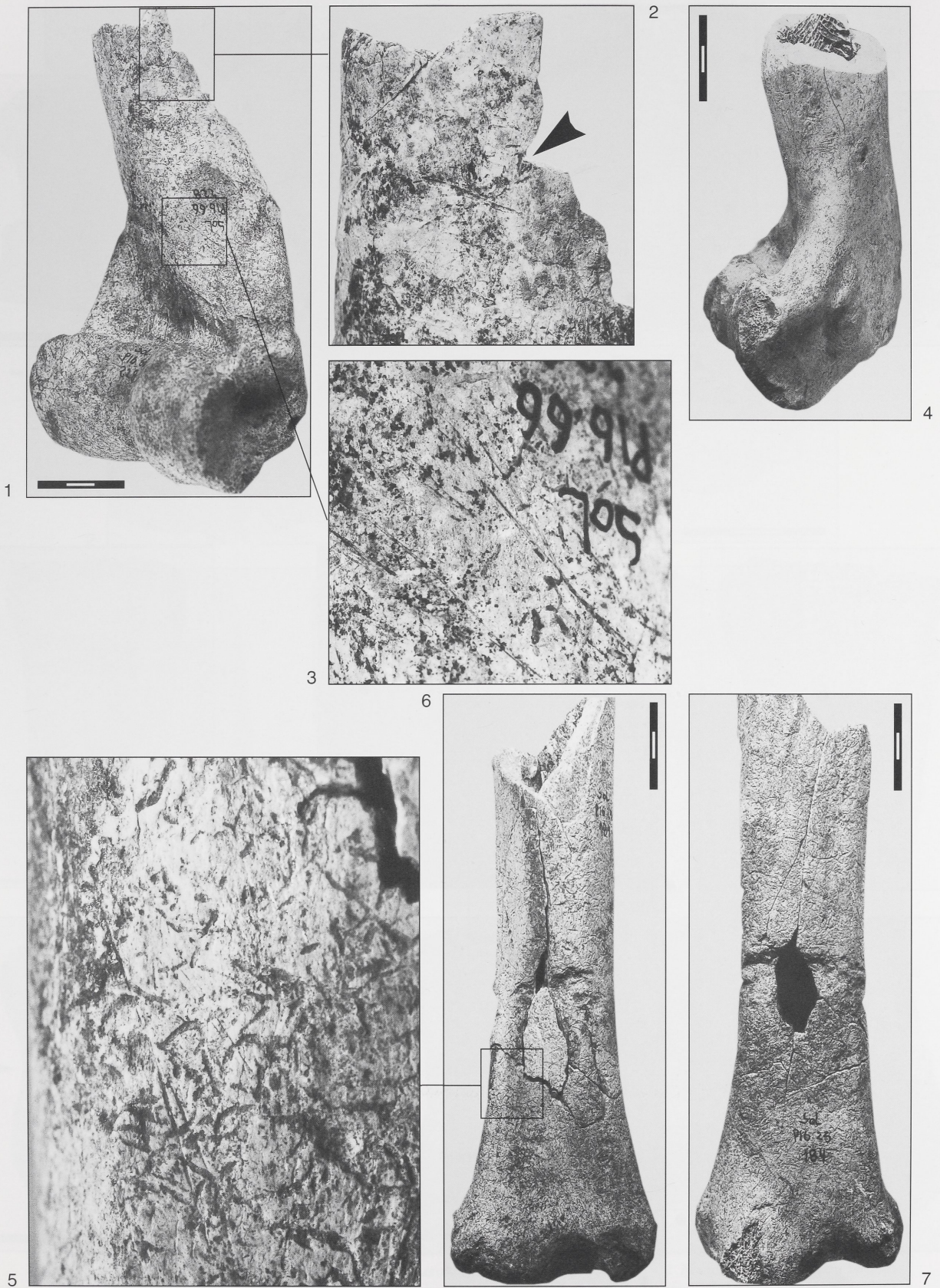


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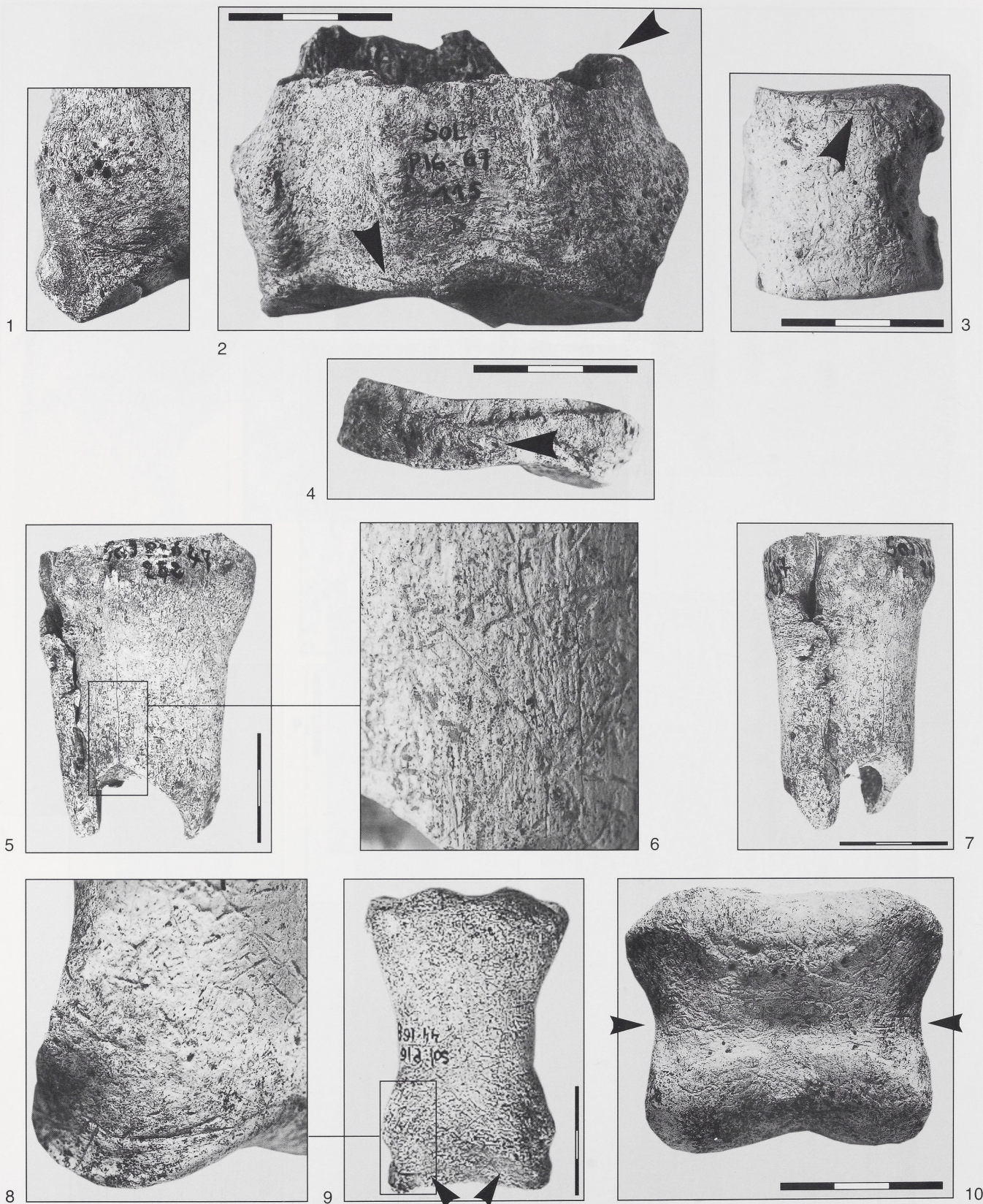
Cut marks on horse bones from sector P16. - 1 Cross the occiput of a crania. - 2-3 On the inner side of the symphysis of a mandible and close-up of cut marks. - 4-5 Cut marks across the outer (buccal) surfaces of an upper cheek tooth row (P2-M2) and detail of cuts on the P3. - All scales = 3 cms.



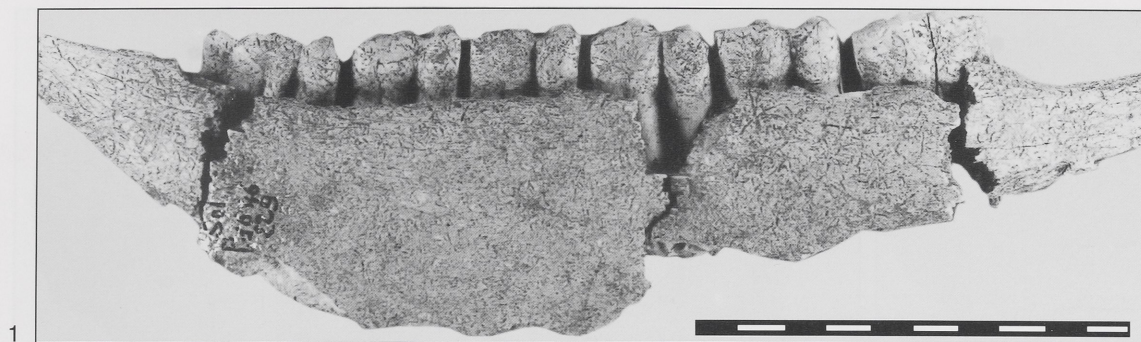
Cut marks on horse bones from sector P16 – 1-3 Cut marks (above) and carnivore tooth scores (below) on the outer (lateral) face of an ascending ramus of a mandible. Comparison of V-shaped, more sharply-defined cut marks produced during removal of the masseter muscle (2) with the undulating, U-shaped tooth scores (3). – 4-5 Cut marks in the same location on a second mandible. – 6-7 Cut marks on the ventral surface of the right cranial process of an atlas, produced during separation of the head and neck. – All scales = 3 cms.



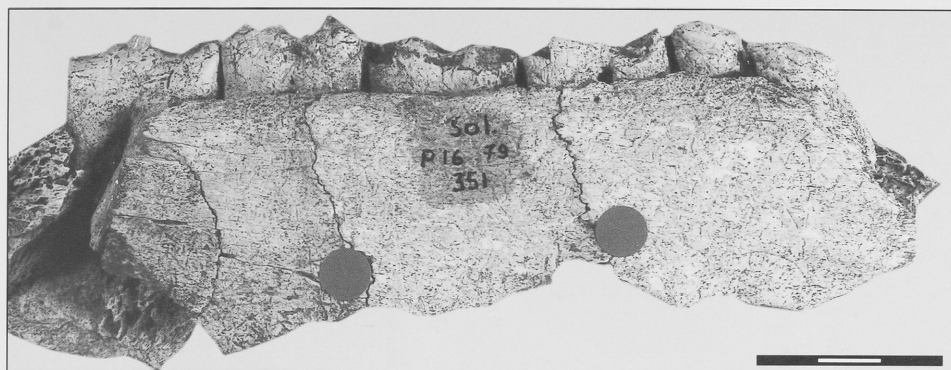
Cut marks and carnivore gnawing on the bones of horse from sectors P16 and I11. – 1-3 Distal humerus of horse with traces of carnivore tooth notching of the edge of the bone (above and inset 2) and cut marks on the cranial face above the joint produced during dismemberment (below and inset 3). – 4 Cut marks on the shaft of a humerus from sector I11. – 5-7 Distal tibia of horse with oblique cut marks on the latero-dorsal face of the shaft above the distal joint (inset 5) and tooth furrows produced by carnivores on the dorsal and plantar surfaces of the shaft of the bone (6 and 7). The opening on the plantar face (7) was probably produced by the pressure of the carnivore's teeth. – All scales = 3 cms.



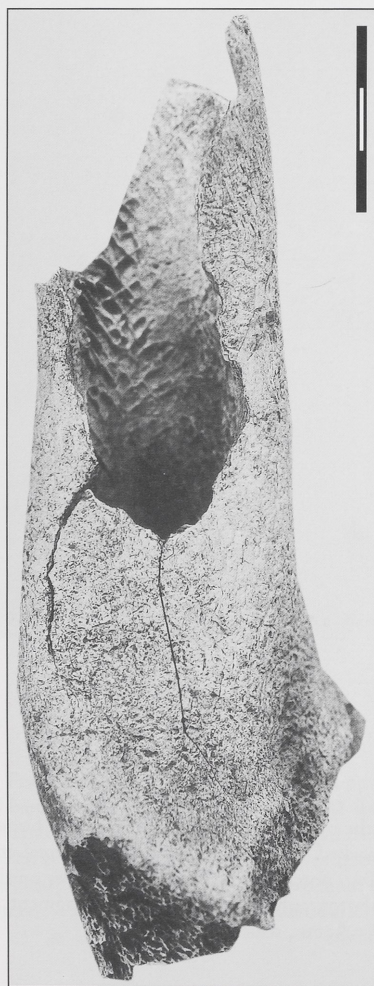
1-2 Radius of horse showing cut marks produced during dismemberment on the medial (1) and dorsal (lower arrow and inset 2) faces of the distal joint. The bone has also been chewed by carnivores, producing the typical »crenulated« end of the shaft (upper arrow). - 3 Left scaphoid of horse; the arrow points to cut marks produced during separation of the radius from the carpals. - 4 Oblique cut marks on the dorsal face of a tarsal bone (os tarsi 3 or great cuneiform) produced during dismemberment. - 5-7 Right metatarsal 3 of horse with oblique cut marks (inset 6) on the shaft probably produced during stripping of the periosteal tissues. The second metatarsal is fused by bony outgrowths (exostose) to the third metatarsal (7). - 8-9 Sets of cut marks (inset 8) around the distal end of first phalange produced either during skinning or dismemberment. - 10 Cut marks on the plantar face of a second phalange produced during tendon cutting. - All scales = 3 cms.



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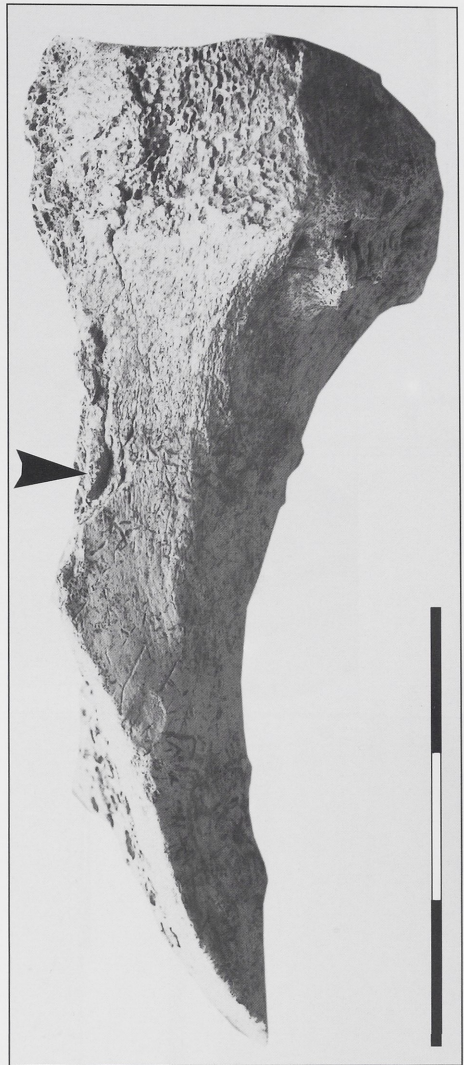
1 Mandible of horse showing state of preservation after removal of basal edge during marrow extraction. Scale = 10cms. - 2 Mandible of horse with two impact notches (marked by circles) on outer surface of the jaw placed approximately at the tips of the roots of the teeth. The teeth are heavily worn down, indicating an old individual of horse. - 3 Multiple notches on the shaft of a humerus of horse producing a «channeled» breakage pattern. - 4 Proximal end of a radius of horse, showing one of two impact notches (circle) which have opened a «window» into the marrow cavity. - All other scales = 3cms.



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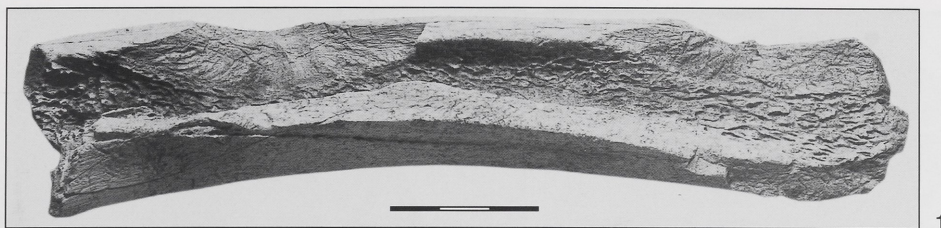


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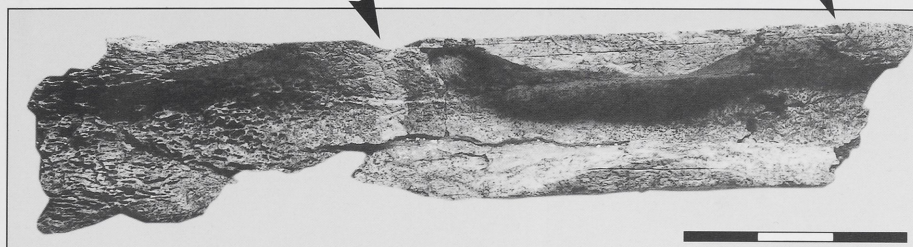


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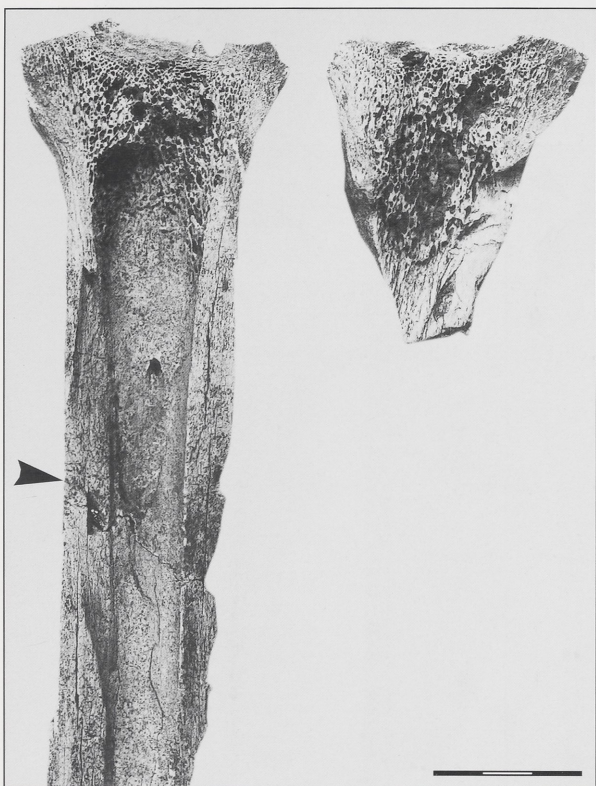
1. 2 Deep impact notch on the outer (1) and inner (2) shaft of a humerus. - 3 Incipient notch (marked by arrow) close to the proximal end of the shaft of a tibia. - 4 Two notches with overlapping flakes on the inner side (right side of photograph) of a femur shaft fragment. - Scales for 1-3 = 5 cms., scale for 4 = 3 cms.



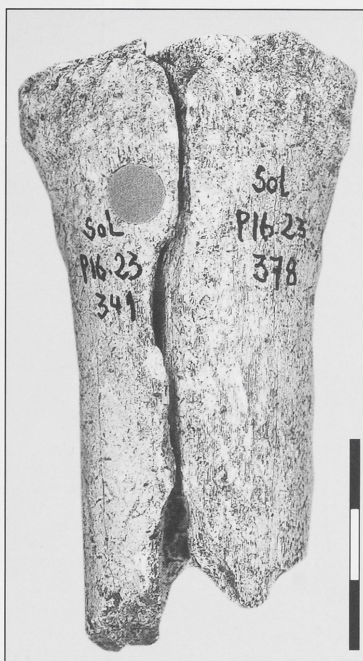
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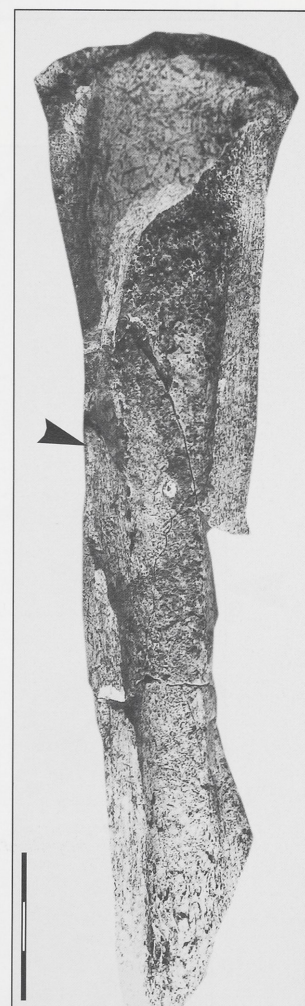
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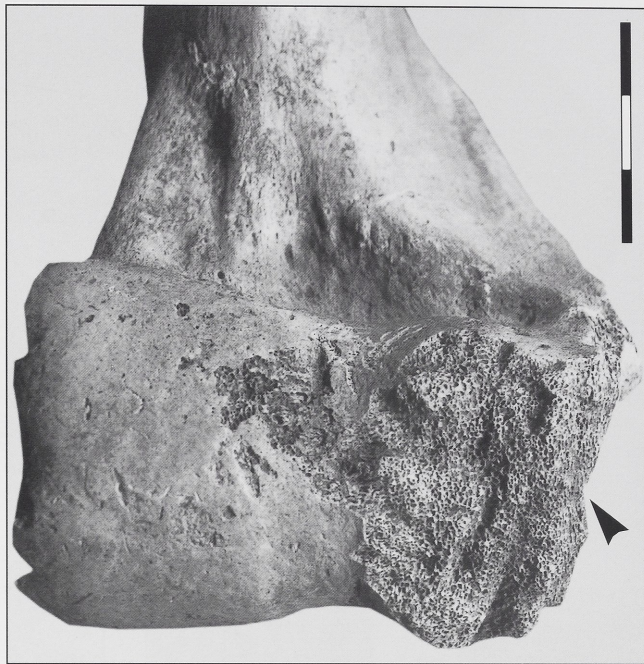


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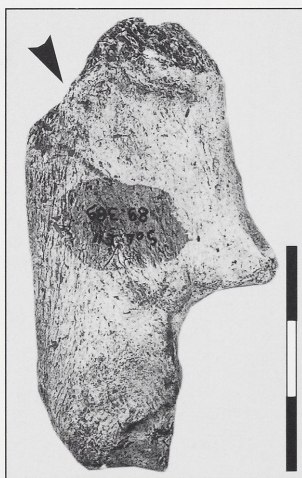
1 Fragment of a radius shaft with two impact notches with well-defined, broad arcuate flakes typical of hammerstone fracture (top edge). – 2 Two sets of opposing notches (arrows) on the shaft of a third metatarsus indicating the use of an anvil (reflective percussion). – 3 Proximal end of a third metatarsal cleaved in two when the bone was fractured longitudinally. – 4 Conjoined fragments of a third metacarpus cleaved through the proximal end. The location of an impact notch is indicated by the circle. – 5 Shaft of a third metatarsus after marrow extraction. The proximal end is intact in this specimen. All scales = 3 cms.



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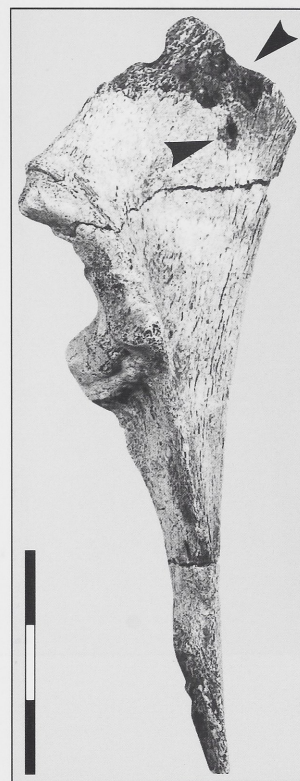
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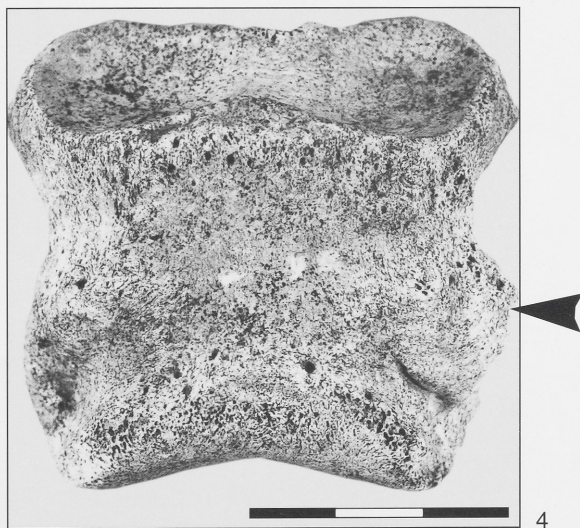
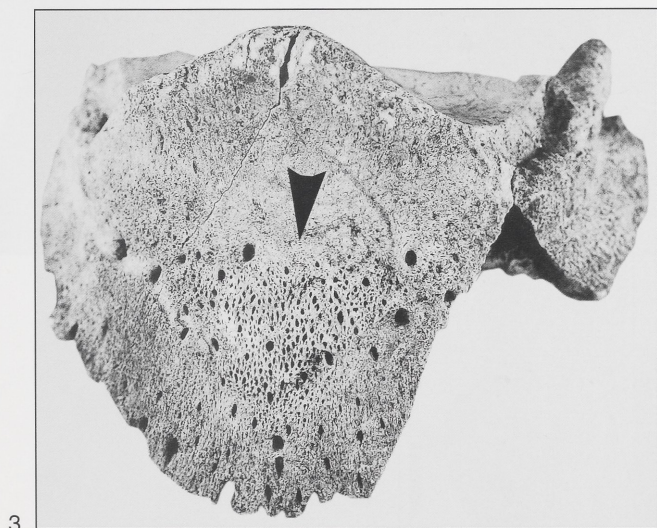
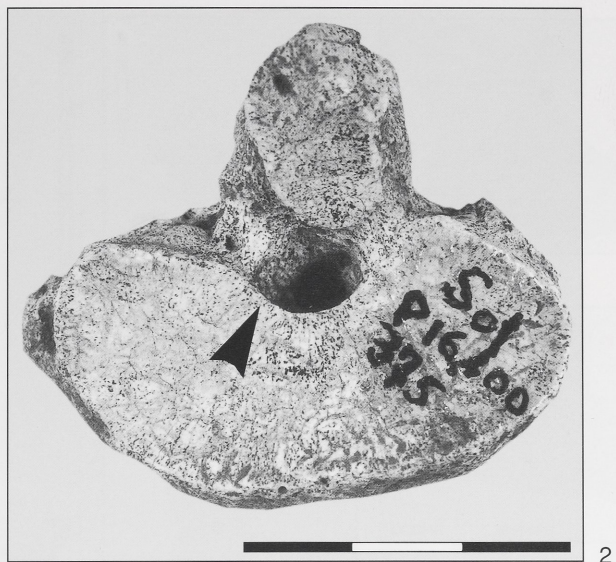


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Carnivore modification of horse bones. - 1 Tooth furrows in the spongiosa of a proximal femur. Scale = 3 cms. - 2 Tooth furrow and loss of bone on the distal end of a humerus (sector I11). Scale = 3 cms. - 3 Typical modification of the tuber calcis of a calcaneum. Scale = 5 cms. - 4 Tooth puncture (arrow below) on the body (corpus) of a vertebra and tooth notching on the stump of the vertebral process (arrows above) (sector I11). Scale = 3 cms. - 5-6 Typical carnivore modification of the proximal end of the ulna including tooth notching (5) and tooth notching and puncturing (6). Scale = 5 cms.



Pathological horse bones. – 1 Upper third molar with abnormal wear (arrow). – 2 Abnormal opening in the centre of a tarsal bone (Os tarsale 3). – 3 Localised lesion on a third phalange, possibly caused by osteoperiostitis. – 4 Abnormal outgrowth (exostose) on the periarticular region of a second phalange. – All scales = 3 cms.



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1.-2 Localised lesions (inset 2) possibly caused by osteoporitis on the lateral sides of a left and right pelvis of an individual horse. - Scale = 10cms.



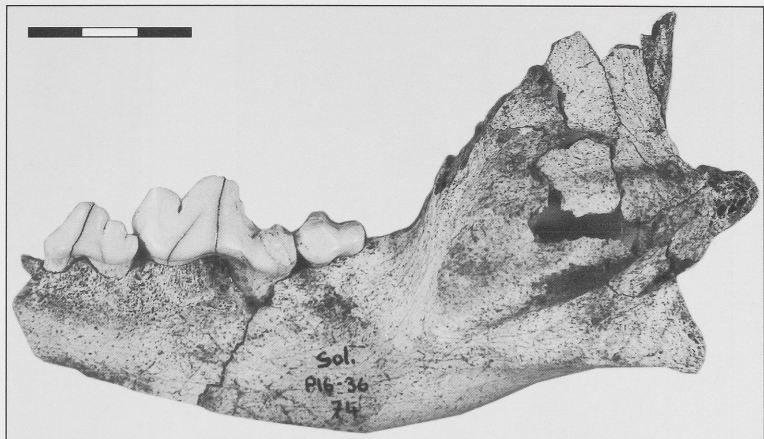
1 Shed antler of reindeer. - 2. 3 Reindeer antler frontlets. Note the presence of a resorption line towards the base of the specimen figured in 3. - 4-7 Examples of pedicles from young reindeer. - 8 Cut marks (arrow) towards the distal end of a scapula of reindeer. - 9 Cut marks (arrow) on the lingual surface of a mandible of reindeer, between lower M2 and M3. - All scales = 3 cms.



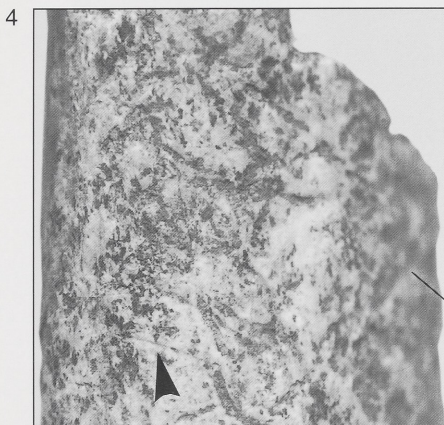
1 Scalloping of the distal edge of a scapula of reindeer by carnivores. – 2 Carnivore tooth notches and loss of bone in the region of the coracoid process. – 3 Tooth notches on the shaft of a femur. – 4 Multiple tooth punctures on the calcaneum of a reindeer. – 5 Carnivore gnawing traces on the tuber calcis of a calcaneum of reindeer. – 6 Mandible of a wolverine. – 7 Femur of wolverine with tooth notch towards head of femur. – All scales = 3 cms.



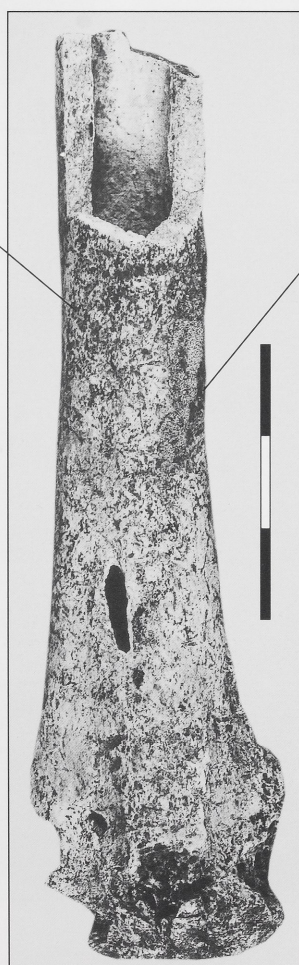
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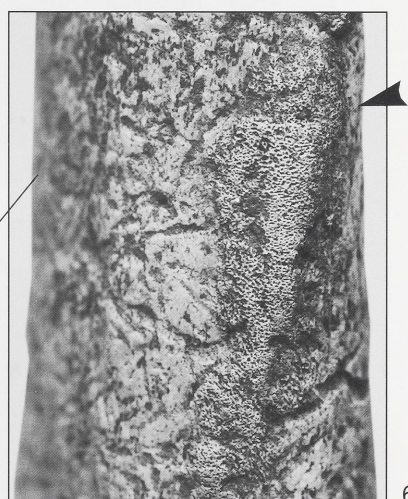
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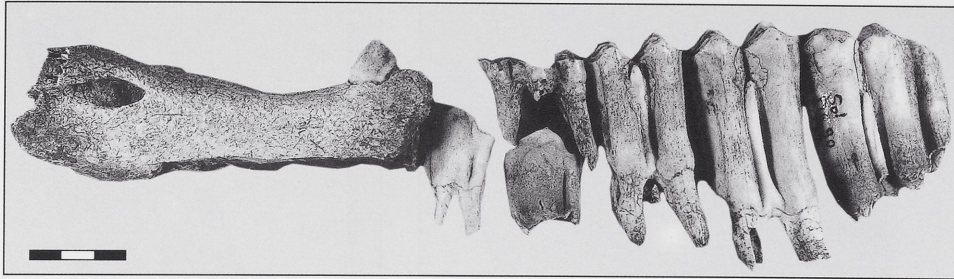


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1. 2 Right and left mandibles of an adult wolf. - 3 Distal end of a radius of a wolf with ?cut marks (inset 4), traces of carnivore gnawing (inset 5) and localised lesion (inset 6). - All scales = 3 cms.



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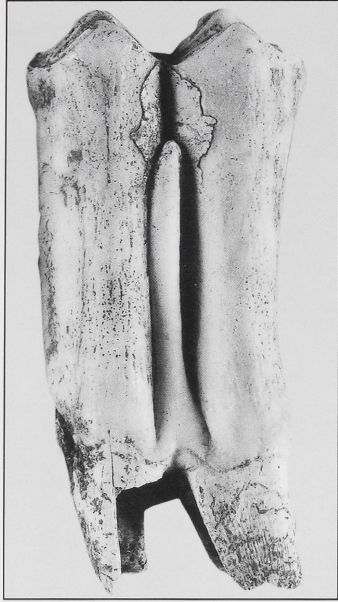


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1 Left lower mandible of bison with P2, dp4, M1-3. P3 and 4 unerupted in their crypts. Permanent cheek teeth of bison. - 2 Upper M1, buccal view. - 3 Upper M1, buccal view. - 4 Upper M2, lingual view. - 5 Upper M1, lingual view. - All scales = 3 cms.



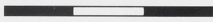
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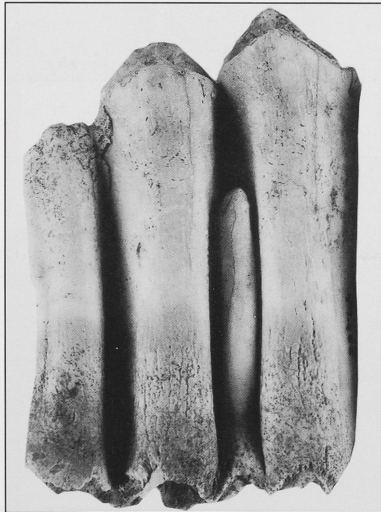
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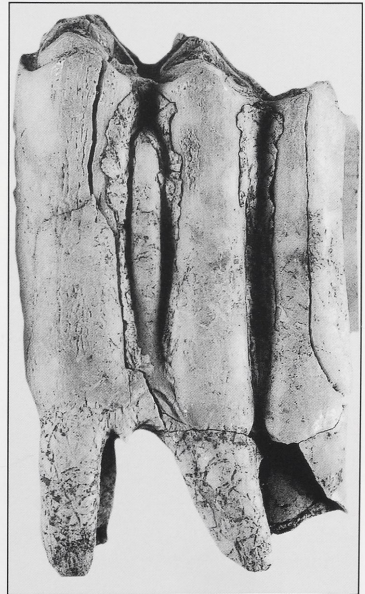
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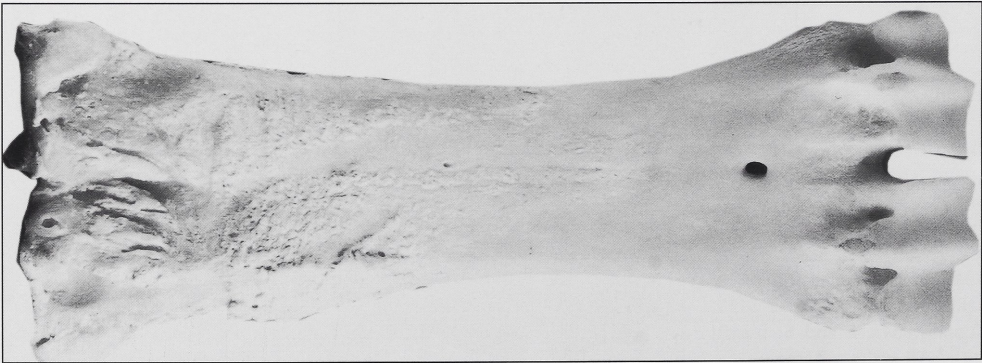


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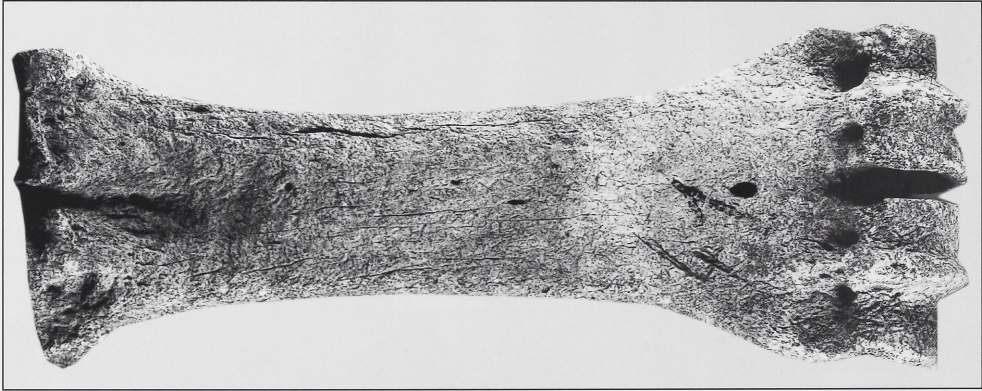


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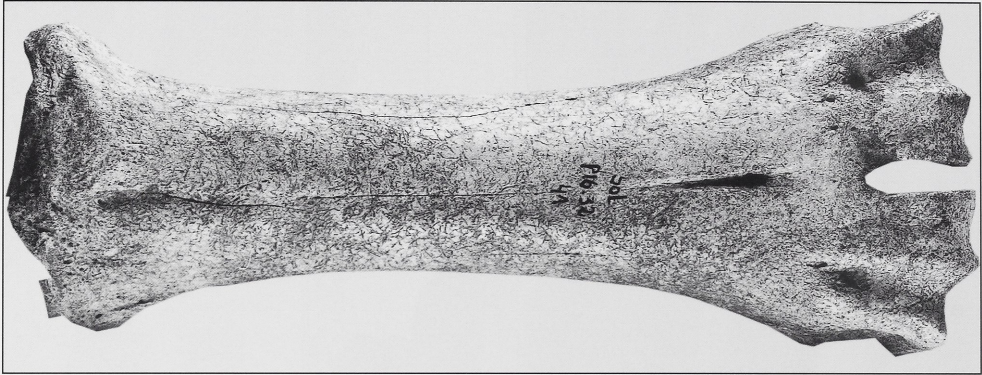
1. 2 Lower M2 and M1 of an individual bison, buccal views. - 3-6 Lower M3's, 3 and 4: lingual views, 5 and 6: buccal views. - All scales = 3 cms.



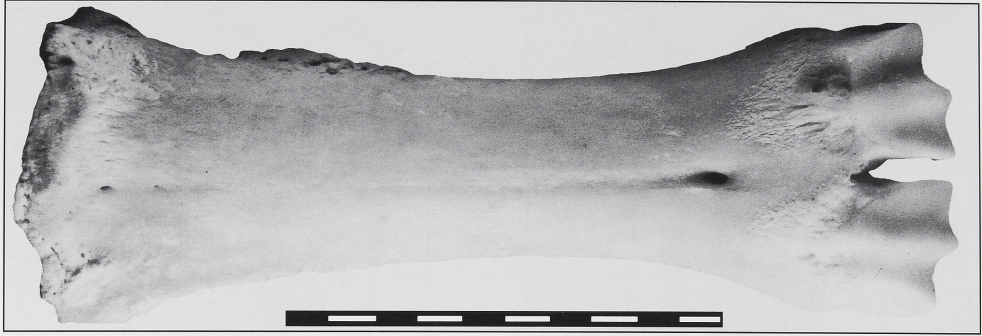
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Metacarpals of bison from sector P16 compared with those of recent European bison (*Bison bonasus*). - 1 Recent bison. - 2 Specimen from P16, Dorsal views. - 3 Specimen from P16, Plantar views. - 4 Recent bison, Dorsal views. - Scale = 10cms.



Carnivore modification of bison bones. – 1 Humerus showing tooth furrowing on distal end (lower arrow) and crenulation of proximal end of shaft (upper arrow). – 2 Three bone »cylinders«. All the specimens are femurs of bison with typical modification produced when carnivores gnaw away both the proximal and distal ends of the bones. – 3 Calcaneum of bison showing typical gnawing traces on tuber calcis. – 4 Gnawing traces on a second phalange of bison. – 5 Tooth scoring and gouging on the proximal head of a femur. – All scales = 3 cms.



Examples of the bone and antler industry from sector P16. – 1-2 Metacarpal of horse used as a needle-core, lateral view (1), dorsal view (2). – 3 Bâton-percé made of reindeer antler. – Scale = 10 cms.