

RECENT DISCOVERY OF A MAMMOTH MOLAR IN THE
MIDDLE TRENT VALLEY GRAVELS NEAR EGGINTON,
DERBYSHIRE

by Robin J. Heath

Summary

The discovery of a mammoth molar in the river gravels of the Middle Trent Valley is recorded. The tendency of the tooth to split and crumble has been checked by treatment with plastics.

Introduction

Late in 1968 a visit to the gravel pits at Egginton led to the disclosure by workmen that a tooth had recently been found. The tooth was subsequently acquired for study, treated with preservatives, and returned to its owner.

The Nature of the Gravels

At a locality near Egginton Station (SK 255293) extensive, well-stratified sheets of mixed sand and pebbles occur, varying considerably in texture and colour. The deposits are approximately thirteen feet (four metres) thick with the upper surface virtually level at about 150 feet O.D. Beneath the gravels purple to chocolate coloured clays were found. The overburden had been removed prior to exploitation. The workings were kept dry by pumping, through the abandoned pits are now filled with water. The gravels probably belong to the Floodplain Terrace.

Description of the Tooth

The tooth is built up of 25 narrow close-packed plates and is identified as a molar of the mammoth, *Elephas primigenius* Blumenbach (see Leith Adams 1877-81). The grinding surface is characteristically flat and the pattern of ridges on it is shown in Plate 9.

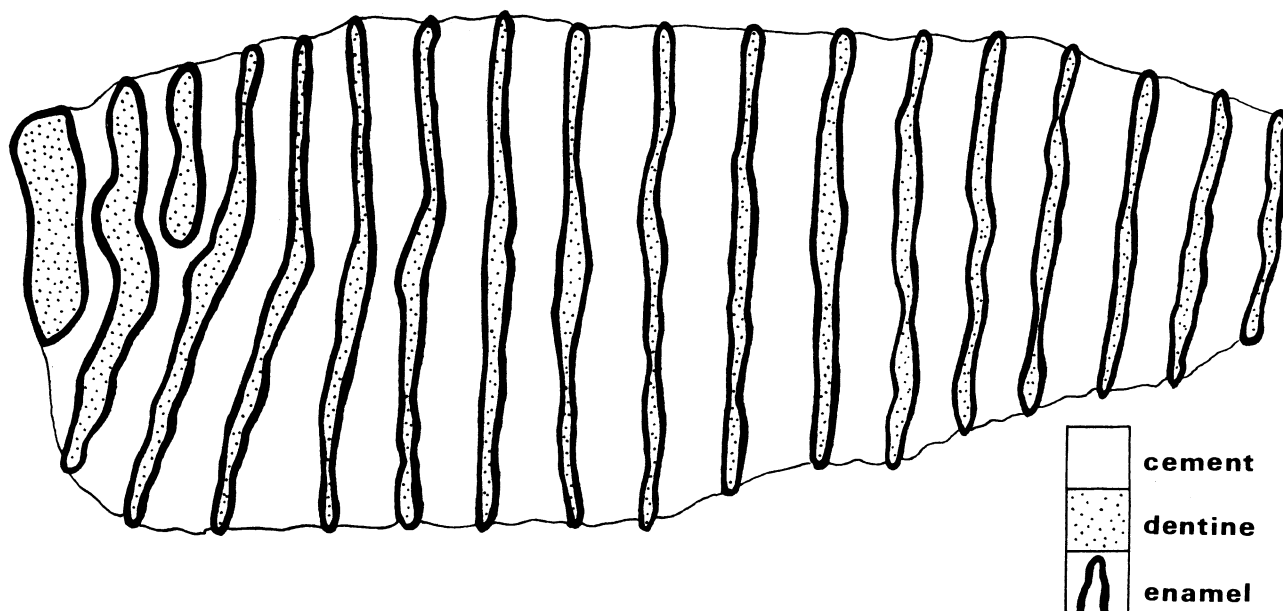
Preservation

Owing to the lamellar construction of elephant molars there is a tendency for them to split open on drying (see Plate 9.) A comprehensive treatment became urgent in order to preserve it, modifying the method of Rixon (1961). The process consists essentially of impregnating the tooth with plastic materials, first by repeatedly soaking with polyvinyl butyral dissolved in 95% alcohol and then by coating in polyvinyl acetate emulsion. On completion the tooth remained stable under varying climatic conditions and should be in a suitable condition for permanent display.

Acknowledgements

The co-operation of Hilton Gravel Ltd., Hilton, Derbyshire, in granting access to their gravel pit, and to Mr. Burford of Etwall who made the tooth available for study, are gladly acknowledged. The author is deeply indebted to Mr. B.D. Adams, a former colleague, for his invaluable help in the field and in the laboratory. Thanks are also due to the School of Photography, Derby College of Art, for Plate 9. and to Revertex Ltd., The Strand, London, for the generous gift of two bottles of polyvinyl acetate emulsion.

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Text-figure 1. The pattern of ridges on the grinding surface of a third molar of *Elephas primigenius* (length 20 cm).

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Manuscript received 28 June 1971.

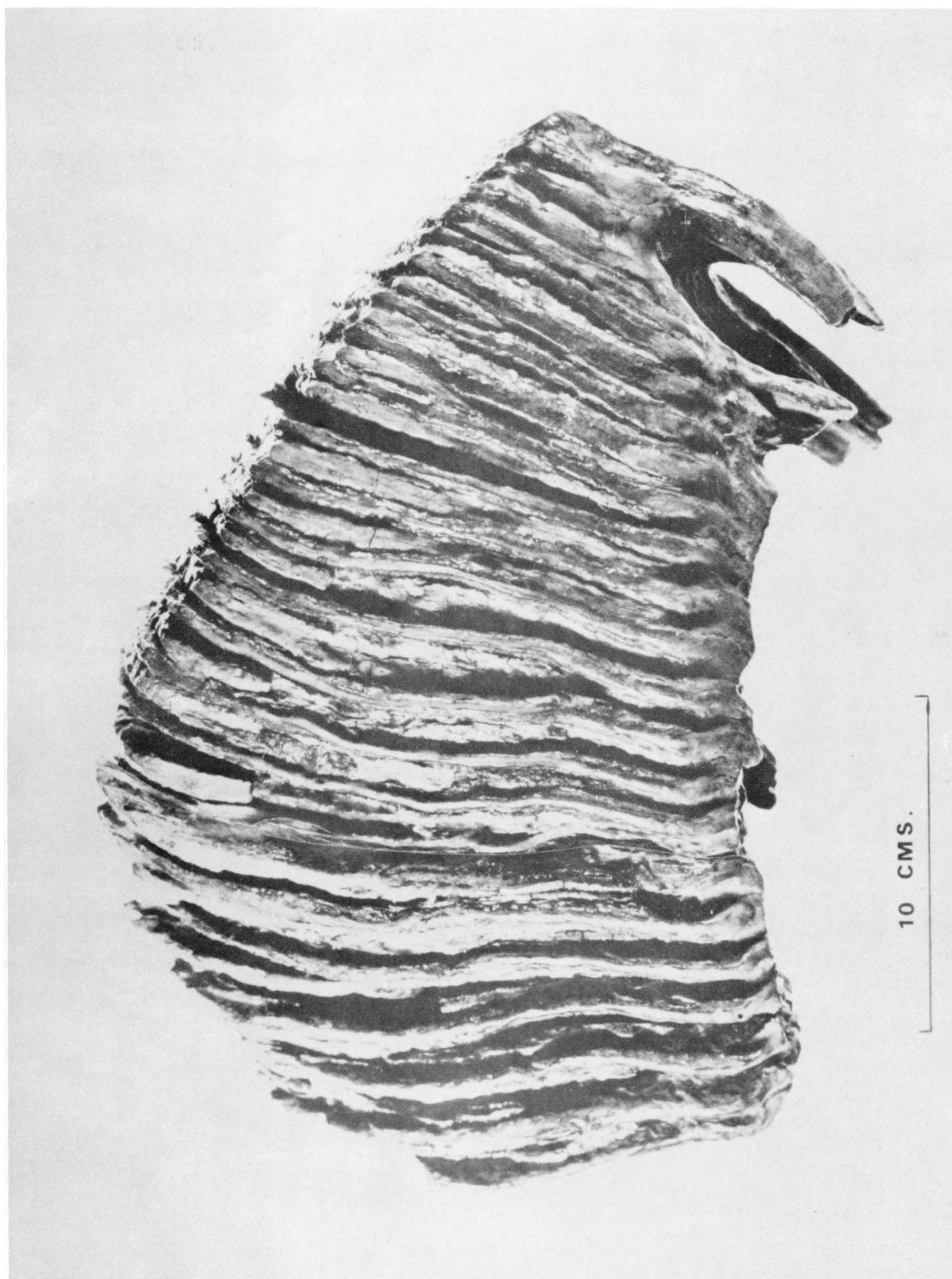


PLATE 9

Lateral view of a third molar of *Elephas primigenius* from the Trent Valley Flood Plain Gravels near Egginton, Derbyshire.