Animal footprints on Roman bricks from Newstead Walter Elliot*

ABSTRACT

Describes recent finds of animal footprints on fragments of Roman bricks and tiles from the fort at Newstead, Roxburghshire.

Since picking up a Roman stamped tile while field-walking at Newstead in 1985 (Elliot 1986), the writer has paid particular attention to the spread and variety of brick and tile on the site. The identifiable spread of brick and tile is on the west side of the fort with the heaviest concentration being in the bath-house/mansio area. Less dense concentrations were located in the centre of the fort around the headquarters building. There are no surface finds of brick and tile in the eastern section of the fort. Enough brick and roofing tiles were found in the south annexe to indicate that tile-roofed and at least partially brick-built buildings once stood in this area of the site.

In the south-west corner of the fort, a concentration of fused bricks and distorted roofing tiles was noted and interpreted as the site of a kiln producing bricks and tiles. The numbers of vitrified fragments would suggest that it was a clamp kiln which has a poorly controllable temperature range.

THE BRICKS/TILES

The majority of bricks and tiles retrieved during field-walking were fragments. Only one complete brick and one almost complete though distorted *tegula* were recovered, but it was possible to identify the products of the Newstead brickworks from the fragments.

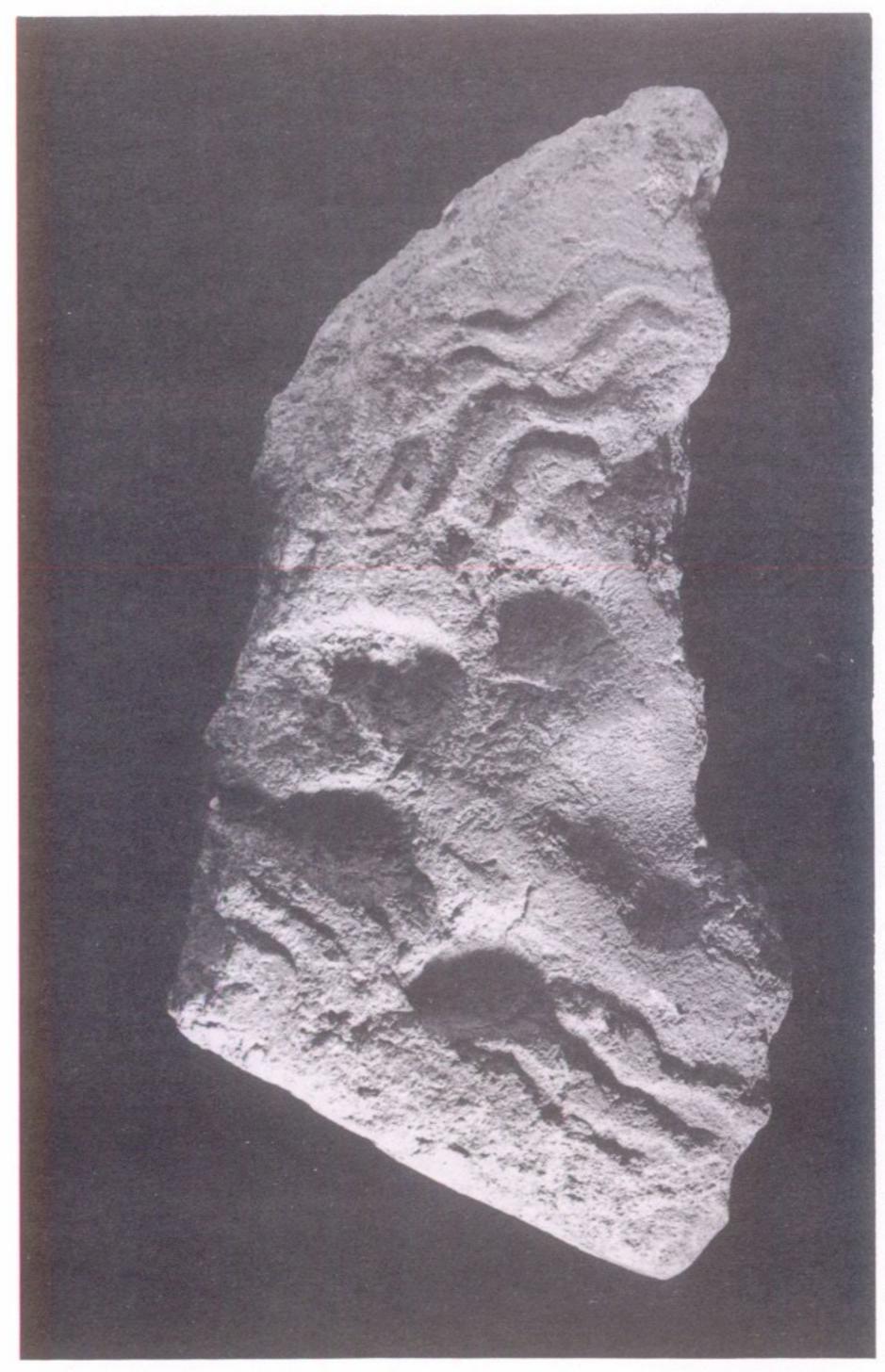
BRICKS

The only complete brick found during the field-walking at Newstead conforms almost exactly to the *laterculus besalis* (little 8 in brick) measuring $8 \times 8 \times 2\frac{3}{4}$ in. From the thickness of the portions recovered, it appears that this was the common size, although there are also examples of the 2 in thick brick, with the 3 in brick being less common.

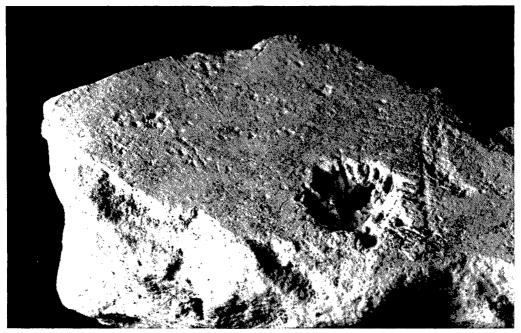
TILES

Flat thin tiles, 25mm or less in thickness, were noted from most of the brick and tile concentrations within the fort and its annexes.

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rom Newstead. Scale 1:1 Impressions of a dog's foot on a tile



ILLUS 2 Clawmarks of a small mouse or shrew on a brick fragment from Newstead. Scale 2:1

ROOFING TILES

The standard roofing tiles (*tegula* and *imbrex*) were found in all concentrations in the western half of the fort, the baths/*mansio* and the south annexe. The proportion of roofing tile as compared to brick, was greater in the south annexe.

SCORED TILES

Scored facing tiles (parietalis) and scored box-flue tiles from the central heating systems (tubulus) were found largely in the baths/mansio complex and the area of the headquarters buildings. There were also many fragments in the south-west corner of the fort – the conjectured kiln area.

PIPES

Portions of water pipes and smaller tubular pipes have been recovered from most of the find spots. There were no notable concentrations.

THE ANIMAL FOOTPRINTS

It is accepted that Roman bricks and tiles were made using removable mouldboards and allowed to dry in a roofed area which was open at the sides. After drying to 'leather-hardness', they were then fired; this made permanent any marks which the brick had acquired in its earlier and softer state (Brodribb 1987, 125). Various animals left their marks on the clay of the 'green' bricks and tiles at Newstead. Obviously the softer the clay and the heavier the animal, the deeper the imprint. All finds recorded below have been recovered by a systematic pattern of field-walking.

DOG

Six impressions of dogs' feet were identified, each on a separate tile. Three of these were from small dogs and three from larger dogs (illus 1).

SHEEP/GOAT

Five examples of sheep/goat prints were noted, two on brick and three on tile. It is accepted that the native sheep in Britain in Roman times resembled the present-day Soay sheep. The prints on the Newstead bricks are very small, even for Soay sheep, and may have been made by lambs or kids.

MOUSE/SHREW

One of the brick fragments has the footprints and clawmarks of a small mouse or shrew which had been scraping at a grain stuck in the wet clay (illus 2).

PIG

A pig's footprint was noted on one of the Newstead brick fragments. Pig-prints have not been noted on the bricks and tiles from English excavations, for example at Silchester, which led to the conclusion that the pigs were kept in sties or woodlands away from the area of the brick and tile-works.

CONCLUSIONS

The sample is too small to allow any detailed discussion. The sheep/goats and pigs were likely to have been animals kept for food, and bones of these animals, and of dogs, were found during Curle's excavations. From the small prints of the sheep/goats it is possible that most of the bricks were made in the spring and early summer.

ACKNOWLEDGEMENTS

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