

A Pine Marten paw print on ceramic material from The ARP 2016 Excavation

Full report by Julie Curl. April 2017.

Methodology

Ceramic building material is being examined for any animal marks, in the form of paw prints, body drags and tail marks. Any marks are compared to a variety of reference material, including photographs, accurate drawings and known prints. Identifications take into account the drying of the clay and a reduction of the print left after the clay has dried and been fired.

The paw marks

A partial paw print of a Pine Marten (*Martes martes*) was discovered on some of the ceramic building material from 2034A, the rake pit of Kiln 2, during the 2016 Excavation. The print shows three clear toe marks, which are oval in shape and spaced well apart, which is typical of the wide paw of a mustelid, a faint fourth pad is present where it appears a claw made contact with the clay. There is a faint fifth toe, but there had been an inclusion such as flint in the area of that print and the stone has since been lost and this has affected the clarity of that toe mark. The main pad, which is positioned low on the paw, has not registered. There are no clear claw marks showing, but this is a relatively light print on what is likely to have been a fairly dry tile and claw marks do not appear on prints on drier or harder ground (Strachan, 1995). Incomplete paw marks are common and dependant on how the animal was running or walking, in the case of this print, it is probable that the animal was leaping, resulting in only some toes making contact with the clay.



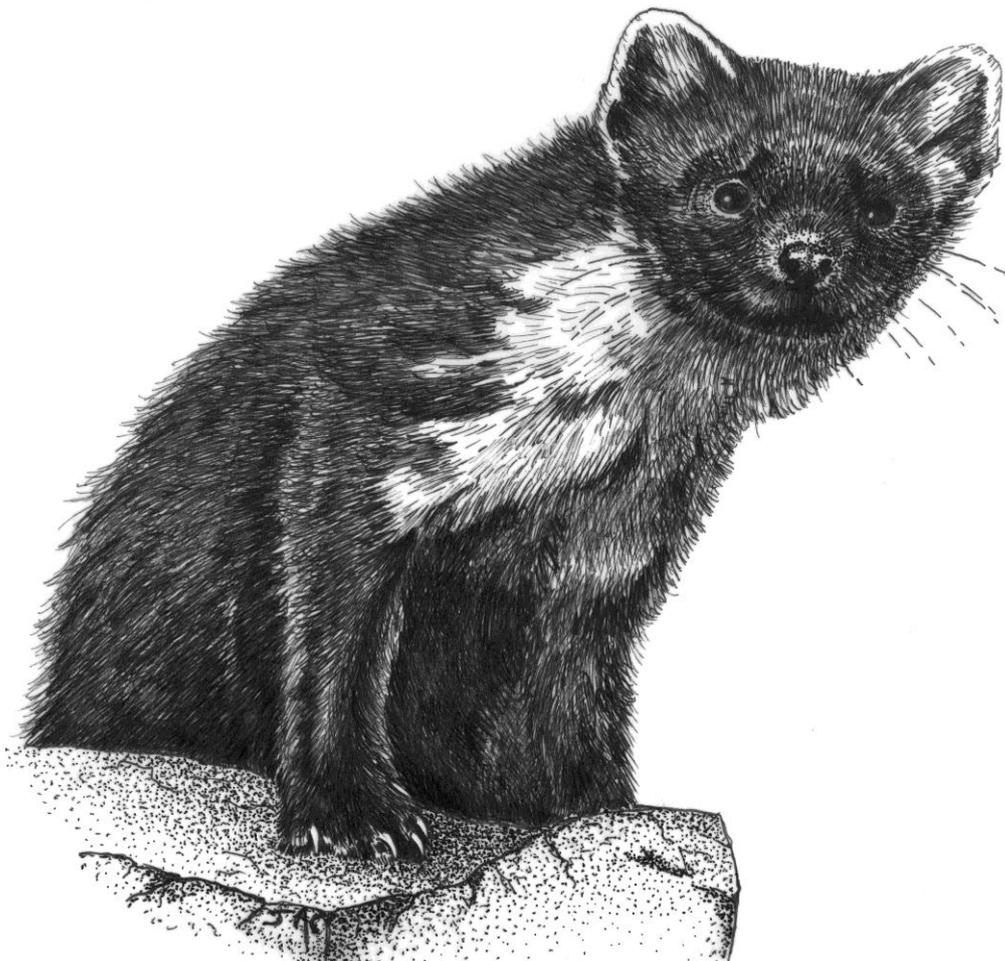
The partial Pine Marten paw print from the 2016 dig ceramic material.

The Pine Marten and history in Britain

The Pine Marten is part of the mustelid family, rich brown and with a cream throat and bib. It has a shoulder height of 15cm, a head and body length of 36-56cm and a large bushy tail of around 17-28cm. Paws are distinctive with this group as there are five toes on each foot. There is a similarity with the paw marks of the Pine Marten and the similar Beech Marten (*Martes foina*), however the Beech Marten (also known as a Stone Marten) is very unlikely. The Beech Marten is generally

considered a species that has not lived in Britain, although it is known in much of Western Europe (Yalden, 1999).

The Pine Marten is relatively rare in most of Britain, but it would once have been widespread. Today it is more common in northern and western areas and in Scotland in particular, with an increasing population in Shropshire, which may have extended from residents further west. Usually this animal prefers pine forest, but also inhabits mixed and deciduous woodland. Martens prefer woodland, preferably mature woodland, but in parts of Scotland and Ireland they inhabit bare rocky hills, moorland, open heather and sometimes seashore (Sleeman, 1989), they are also seen on open rocky ground and cliffs where the niche has been vacated by Polecats (Macdonald and Barrett, 1993) so habitats can vary. The Pine Marten has a varied diet depending on habitat. They take small mammals such as voles and mice, invertebrates, small birds and fruit and nuts when available, occasionally taking frogs, lizards and fish (Sleeman, 1989).



Drawing of Pine Marten showing how the paw touches on firmer surfaces, note the claws do not always make contact with surface. Drawing: J.A. Curl.

Archaeological evidence for the Pine Marten in Britain is scarce. Various species of Marten were present in Pre-Ice-Age Britain, including the Pine Marten. A Romano-British Pine Marten burial is listed in records by Morris (2011), but details are limited for this record. Several lower limb bones, some butchered, were found in Anglo-Scandinavian York (O'Connor, 1991) which were from skinning waste, the attribution of the bones to Pine Marten was largely due to the known absence of the Beech Marten in the UK. There is no archaeological record of the Beech Marten in Britain, although it may

be possible that they have been confused with remains of Pine Marten as it is differences in the teeth that allow the two species to be distinguished (Yalden, 1999).

Conclusions

A partial print, as seen with the Pine Marten is very common and is dependent on whether the marten was running, walking or leaping at the time as well as being affected by the state of the ceramic material at the time of contact. The registration of just the toes would suggest a leap, which is a typical movement seen with this group of animals. The clarity of each toe is dependent on the state of the ceramic material, which can vary in consistency, even across one fairly small surface and this can be affected by moisture and inclusions (such as re-used ceramics or organic matter) within the material.

The Pine Marten at the Aylsham Roman Project had clearly ventured out of woodland, presumably at night, probably for hunting. The site during the Roman period, especially the area of the kilns and waste pit, would have attracted a variety of wildlife. The kilns when under construction and when not in use and the waste pit would have acted as pitfall traps for the smaller wildlife such as voles, mice, herpetofauna and invertebrates. Creatures that succumb to pitfall traps may spend a few hours in distress and attempting to escape and this would attract predators like the Pine Marten. It is probable that when the kiln was built and drying prior to use that the Marten was hunting trapped creatures in kiln and a print was left.

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