

Late 15th–early 17th-Century Tanning Waste
from 3–4 South Place, Islington

Publication Note



LATE 15th–early 17th-CENTURY TANNING WASTE FROM 3–4 SOUTH PLACE, ISLINGTON

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SUMMARY

Wessex Archaeology was commissioned by FREP (South Place) Limited to carry out a programme of archaeological work in advance of the proposed redevelopment of 3–4 South Place, Islington (NGR 532863 181754; MoL site code SOX10). The site is located *c.* 200m north of the line of the historic defences of the City and the site of the medieval ‘Moorgate’, in an area of historically wet and marshy ground on the west side of the Walbrook valley.

The archaeological work, undertaken in 2010, comprised a test-pit evaluation, monitoring engineering thrust-block pits and an excavation of a 225m² area at the eastern end of the site, below the basement levels of the demolished Spencer House. Within this area were various modern disturbances, primarily 20th-century structural remains and service trenches.

Archaeological remains were restricted in type and date, and the excavation targeted an area of late medieval and early post-medieval brickearth quarrying. The quarries were filled with dumped deposits, and are comparable to similar discoveries at other sites in the Moorgate area. The dumps of material were relatively rich in later medieval and early post-medieval pottery (late 15th–early 17th century), with later pottery (18th–20th century) present in small quantities. The dumps also contained

large quantities of animal bone representing tanning and butchery waste, a few pieces of iron smithing and bell casting debris, building material, oyster shell, and cess-like and organic-rich deposits suggesting animal and human waste.

ANIMAL BONE ASSEMBLAGE

Following assessment (Wessex Archaeology 2011), the late 15th–early 17th-century animal bone assemblage was the subject of further analysis in 2011 in order to prepare a full archive record and a dataset that can be used for comparison with other, similar assemblages from the area. The principal results of the analysis are summarised below, with accompanying tables and full details of the methods may be found in the archive (the archive will in due course be deposited with the London Archaeological Archive and Research Centre).

A total of 3,120 fragments (or *c.* 60.042kg) of animal bone were recovered from the site (once conjoins are taken into account this figure falls to 2,375 fragments). Approximately half of the assemblage by fragments count (and 96% by weight) was recovered during the normal course of hand-excavation; the rest was retrieved from the residues of seven bulk soil samples. The majority (98%) of the animal bone is from late 15th–early 17th-century dump deposits and redeposited brickearth.

The assemblage is dominated by bones from domestic livestock species (*c.* 57% NISP (number of identified specimens)), in particular cattle. The cattle bone assemblage includes a significant amount of tanning waste and this is discussed further below.

General refuse

Sheep bones are relatively common (14% NISP) and the body part data indicates that although mandibles are the most numerous skeletal elements, bones taken to indicate good quality meat joints from the shoulder and leg are also well-represented in relation to waste elements such as skulls and foot bones. This contrasts with the cattle bone data and indicates that the sheep bone assemblage is almost entirely made up of domestic food refuse rather than industrial waste.

Pig is the least common of the three livestock species, its bones accounting for only *c.* 7% of the total NISP. The body part data indicates that whole carcasses are represented, and this could suggest that pigs were reared and slaughtered locally, perhaps by individual households, or that whole rather than dressed carcasses or individual joints were procured.

The rest of the assemblage includes a range of other mammals (6.2%), birds (5.6%) and fishes (3.1%) and is more characteristic of domestic food refuse.

Overall, the food waste deposited with the industrial waste suggests a meat diet primarily made up of beef and mutton, with some pork, fish, domestic poultry, venison, rabbit and hare, and the occasional luxury food item (eg woodcock, swan and crane). It is unclear whether or not this waste came from rich merchants houses located in the area and associated with the tanning or leather industries or from households located within the city walls, although the former seems more probable given the local origin of the industrial waste.

Tanning waste

Cattle bones are the most common of the domestic livestock species and account for 36% of the total NISP. The body part data indicates that although all parts of the beef carcass are present in the assemblage, the most common skeletal elements are metapodials and horn cores (53%). The over-abundance of these particular bones is an indication that much of the cattle bone assemblage results from the processing of hides. In total there are 72 metacarpals (MNI (minimum number of individuals) 44), 51 metatarsals (MNI 29) and 36 horn cores (MNI 18). The number of horn cores is relatively low in relation to the number of metapodials, and this suggests that most horn cores were sold on to horn-workers in order to turn an extra profit and were deposited elsewhere. Alternatively it could indicate that some of the hides supplied to the tanner were from naturally polled (ie hornless) breeds.

The age and biometric evidence indicates that most of the skins were from mature adult males (both bulls and castrates) rather than females, probably generally traction animals past their prime for meat production. However, the cattle body part data also shows that joints of high meat value, especially the shoulder and shank, are relatively common amongst the domestic waste.

Overall, the body part data for livestock species indicates that cattle hides were being processed in close proximity to the site. The skins were purchased by the tanner with the horns and/or feet still attached (see Albarella 2003, 75–7; MacGregor 1989, 119; Serjeantson 1989, 136; Yeomans 2007, 112). These waste products were detached and

discarded at some point during the tanning process and dumped into open quarry pits together with general domestic food refuse from local residences.

The bone waste is characteristic of heavy rather than light tanning. Heavy tanning to produce dark coloured leather from cattle skins can be achieved either by a process of washing, liming and drenching in an acidic liquor containing rye, barley or ash bark and/or urine, or by soaking the skins in an alkaline solution made of dog or other animal dung and bird droppings. However, proper tanning usually involves soaking the skins in vats containing oak bark (ie tannin).

Documentary, pictorial, ethnographic and archaeological evidence indicate that the extremities of the skeleton were left within the skin when it was sold on to the tanner (Thomas 1981, 162; Serjeantson 1989; Armitage 1990, 84; Cherry 1991, 295; Shaw 1996, 107). The precise reasons for this practice are unclear, although various plausible suggestions have been put forward. Serjeantson (1989, 139–40) has suggested that tanners could establish the age of the animal from the horns. This makes sense since the hides of younger cattle will produce higher quality leather and a greater return than the hides from more mature animals. Serjeantson also suggests that the foot bones might have been used to produce neat's-foot oil, which can be used to dress the finished leather. Alternatively, the horns and feet might simply have been left attached to the skin because they are useful during the tanning process (eg for hanging and stretching; see Yeomans 2007, 111). Whatever the reason behind this practice, it would seem from the spatial organisation of related trades within urban areas (eg horn- and bone-workers; see Yeomans 2005; 2007) that tanners regularly sold on at least some of the by-products from their industry.

Deposits of waste from heavy (and light) tanning industries have been recorded from a number of sites in London and elsewhere (see Albarella 2003, appendices 1 and 2), but perhaps the most detailed evidence comes from The Green in Northampton (Shaw 1996). At this site the bone evidence for industrial activity (Harman 1996, 89–102) is supported by structural evidence in the form of numerous circular and rectangular tanning pits. No tanning pits were present within the development area at 3–4 South Place, Islington, however documentary evidence records that leather workers had lived and worked in the Walbrook area since at least the mid-14th century, when an ordinance was issued by the Pelterer's Guild encouraging relocation north of the city walls, and possible tanning pits lined with timber have been identified at other sites in the Walbrook valley (Drummond-Murray & Liddle 2003, 90). Furthermore, evidence recovered from a number of sites in the vicinity of South Place indicates that the area was not just occupied by tanners, but also specialist leatherworkers and related trades. For example, evidence for the processing of deerskins has been recorded from Moor House (Armitage & Butler 2005), and furrier waste and leather off-cuts from the manufacture of dress accessories (eg pouches) were present at Northgate House (Drummond-Murray & Liddle 2003).

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and edited by Phil Andrews. Further details of the project, including a much more detailed report on the animal bones may be found in the project archive, which will in due course be deposited with the LAARC under the accession code SOX10.

BIBLIOGRAPHY

ALBARELLA (2003), U Albarella 'Tawyers, tanners, horn trade and the mystery of the missing goat', in P Murphy and P Wiltshire (eds) *The Environmental Archaeology of Industry* Symposia of the Association for Environmental Archaeology 20, Oxbow Books, Oxford, 71–86

ARMITAGE (1990) P L Armitage 'Post-medieval cattle horn cores from the Greyfriars site, Chichester, West Sussex, England' *Circaea* 7(2) [1990 for 1989], 81–90

ARMITAGE & BUTLER (2005) P L Armitage & J Butler 'Medieval deerskin processing waste at the Moor House site, London EC1' *London Archaeologist* 10 No. 12, 323–7

CHERRY (1991) J Cherry 'Leather', in J Blair & and N Ramsay (eds) *English medieval industries; craftsmen, techniques, products*, Hambleton Press, London and Rio Grande, 295–318

DRUMMOND-MURRAY & LIDDLE (2003) J Drummond-Murray & J Liddle 'Medieval industry in the Walbrook valley' *London Archaeologist* 10 No. 4, 87–94

HARMAN (1996) M Harman 'The mammal bones' in Shaw 1996, 89–102

MACGREGOR (1989) A MacGregor 'Bone, antler and horn industries in the urban context', in D Serjeantson & T Waldron. (eds) *Diet and Crafts in Towns* Brit. Archaeol. Rep. Brit. Ser. 199, Oxford, 107–28

SERJEANTSON (1989) D Serjeantson 'Animal remains and the tanning trade', in D Serjeantson & T Waldron (eds) *Diet and crafts in towns* Brit. Archaeol. Rep. Brit. Ser. 199, Oxford, 129–46

SHAW (1996) M Shaw 'The excavation of a late 15th- to 17th-century tanning complex at The Green, Northampton' *Post-Medieval Archaeol* 30, 63–127

THOMAS (1981) R Thomas 'Leather manufacture in the post-medieval period with special reference to Northamptonshire' *Post-Medieval Archaeol* 15, 161–75

WESSEX ARCHAEOLOGY (2011) Wessex Archaeology 3–4 *South Place, Islington, London, EC2: Archaeological Excavation and Assessment Report*, unpub report

YEOMANS (2005) L Yeomans 'Spatial determinants of animal carcass processing in post-medieval London and evidence for a co-operative supply network' *Trans London Middlesex Archaeol Soc* 55, 69–83

YEOMANS (2007) L Yeomans 'The shifting use of animal carcasses in medieval and post-medieval London', in A Pluskowski (ed.) *Breaking and shaping beastly bodies: animals as material culture in the Middle Ages* Oxbow Books, Oxford, 98–115



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