

Southampton French Quarter 1382

Specialist Report Download E4: Charred, mineralised and waterlogged plant remains

By Wendy Smith

As part of excavations at Southampton French Quarter (hereafter SFQ) (NGR SU 419 111) carried out by Oxford Archaeology for CgMs Consulting on behalf of Linden Homes, 188 samples were collected for the recovery of charred, mineralised and/or waterlogged plant remains. In total, 39 samples were identified in the original assessment by the author for full analysis of charred, mineralised and waterlogged plant remains from both the flots and heavy residues. Subsequently, four samples were dropped from the analysis either due to duplication of sampled deposit or an inability to securely phase the deposit. In addition, one sample of hand-picked material was also included in this report. Although Saxon (400-1066 AD) plant remains have been the focus of a number of archaeobotanical investigations at Southampton, relatively few analyses of archaeobotanical material dating from later phases of the occupation of Southampton have been reported.

Method

Samples were collected from a range of feature types including: a layer of burnt wood, cess pits, floor layers, pits, post holes, rubbish pits and wells; however, wells, pits and cess pits are the contexts most frequently fully analysed in this report. Typically 40 L of sediment was collected for the recovery of plant remains; however, in a few cases smaller volumes of sediment were recovered but usually from deposits of <40L in volume. All sediment collected was processed for charred and mineralised plant remains, except in cases where samples were specifically collected for waterlogged plant remains. In such cases, at least 10L of sediment was reserved unprocessed and a 1L sub-sample was processed for the recovery of waterlogged plant remains. In a few cases samples were initially processed for the recovery of charred plant remains, but during processing it became apparent that the deposit was waterlogged. In these cases the entirety of the flot was stored in water and a representative sub-sample of the flot was assessed.

Samples were processed by water flotation with the resulting flot (the material, which floats) sieved to 0.25 mm and the heavy residues (the material which does not float) sieved to 0.5 mm. Samples were sorted using a low-powered binocular microscope at magnifications between x10 and x20. Identifications were made at magnifications up to x45. Oxford Archaeology environmental supervisors sorted the larger heavy residue fractions (typically the > 10mm and the 10mm – 4mm fractions) for ecofacts and artefacts by eye, but where mineralised plant remains or fish bones were present the finer fractions (4 – 2mm and 2 – 0.5 mm) were retained and these were sorted by the author (or by an assistant and then checked by the author) under a low-power microscope at x10 – x20. Frequently sorting of heavy residues took place well in advance of sorting flots and often results in 100% of the >4mm heavy residue fraction sorted for plant remains; whereas, the flot may be sub-sampled for the full analysis. As a result, the scores for the plant remains were factored to equate to the proportion of flot sorted (e.g. if 50% of the flot was sorted, scores for plant remains from 100% of a particular heavy residue fraction (e.g. >10mm, 10-4mm, etc...) would be divided by 2). In cases where the heavy residue score is reduced/ multiplied to correspond to that from the flot, this is indicated by shading of scores, which include ‘factored’ heavy residue identifications.

Preservation of plant macrofossils was highly variable, even in individual samples. In many cases poorly preserved charred, mineralised or waterlogged plant remains would also accompany well-preserved charred, mineralised and waterlogged remains. Mineralised plant remains frequently only partially preserved the seed/ stone often only preserving an embryo with very few characteristics on which to base identification (Carruthers 2005a, 157; see also Carruthers 2000, Green 1979). As a result, 'amorphous mineralised material' is frequently scored for those samples where this poorly preserved material is abundant. The distinction between mineralised plant remains and dried-out waterlogged plant remains was not always obvious with smaller seeds (e.g. nettle - *Urtica dioica* L., fig - *Ficus carica* L. or strawberry - *Fragaria vesca* L.) As a result, these indeterminately waterlogged/ mineralised plant remains have been scored as mineralised; however, such items will be indicated in the tables establishing it is possible that they are (?partially) preserved through waterlogging (but now dried-out) or desiccation (in the case of the post-medieval/ modern hand-picked sample).

Although the different modes of preservation are likely to relate to different routes of deposition (e.g. crop processing = charred; domestic waste/ natural vegetation = waterlogged and cess = mineralised) - they are frequently recovered together from the same deposit and, therefore, are reported together here. In part, this has been done to demonstrate that different components of the assemblage are produced in different fractions - e.g. charred/ waterlogged remains in flots and mineralised remains in heavy residues. It also is not always obvious that mixed waterlogged/ mineralised plant remains are necessarily derived from different activities.

Nomenclature follows that of Stace (1997) for indigenous species and Zohary and Hopf (2000) for cultivated species. The traditional binomial system for the cereals is maintained here, following Zohary and Hopf (2000: p. 28, Table 3 and p. 65, Table 5). Nomenclature for New World taxa follows that utilised by Giorgi (1999) in his review of Post-Medieval London finds.

Results

Tables 1-4 present the results for charred and mineralised plant remains recovered from 34 Late Saxon through Post-Medieval flots and heavy residues at SFQ, as well as one hand-picked collection of plant remains from a Post-Medieval/ Modern deposit. Table 6 presents the results for Anglo-Norman through Post-Medieval waterlogged and mineralised plant macrofossils recovered from five SFQ samples.

The charred assemblage is dominated by cereal remains (grains and chaff) in all phases. Small quantities of charred pulses, fruits and nuts are also recovered, but usually <2-3 items. The weed/ wild plants recovered are a mixture of plants typically occurring as weeds of cereal crops and wetland taxa, such as sedges and rushes. Some of the samples also have taxa which may suggest pasture (e.g. greater plantain - *Plantago media* L. or self-heal - *Prunella vulgaris* L.); however, these taxa are not restricted to such habitats and can occur in waste places or as weeds of crop. Mineralised plant remains are dominated by the remains of fruits, but also frequently include less easily quantifiable material such as cereal bran fragments and/or fruit peel/ skin fragments. Waterlogged plant remains include a number of fruit seeds/ pips/ stones; but usually are dominated by weed/ wild plants that typically occur as weeds of crop or in wetland habitats.

Each main chronological phase has produced a broadly similar range of charred plant remains; however, the main results will be discussed separately, in order to relate these results to other data from Southampton.

Late Saxon Plant Remains (see Table 1)

Six Late Saxon (ca. 900 - 1066 AD) pit samples with charred and mineralised plant remains were fully analysed from this phase of occupation, producing a total of 1669 quantified identifications. The samples

are derived from tenements 172, 173 and 180. The majority of plant remains were charred (N = 1194 or 72%); however, a range of mineralised, or possibly dried-out waterlogged plant remains (N = 475 or 28%) were also recovered from this phase. Although heavy residues were scanned, no mineralised plant remains were noted and, therefore, the Late Saxon data is based entirely upon the flot results.

Cereal grain and pulses were primarily recovered from the charred component of the Late Saxon archaeobotanical assemblage at SFQ. Barley (*Hordeum* sp.), rye (*Secale cereale* L.) and indeterminate free-threshing type wheat (*Triticum* sp.) are the main cereals cultivated in the period. One broad bean (*Vicia faba* L. var. *minor*) and two indeterminate vetch/ garden pea (*Vicia* spp./ *Pisum sativum* L.) were recovered. Charred hazel nutshell fragments were recovered from all six samples. Charred weed/ wild taxa primarily occur as weeds of crop. However, one weed/ wild taxon is possibly more problematic. Weld or dyer's rocket (*Reseda luteola* L.) was frequently recovered from all three Tenement 180 pit samples. Although weld can occur as a weed of crop or waste places, especially as an urban weed, it is also a dye plant. Interpreting seed remains of weld as an indicator for dyeing is not straightforward (e.g. Greig 1981, 273; Hall 1996), especially since weld seeds prolifically and frequently one can only put forward the possibility that it was used as a dye plant in the absence of other forms of corroborating evidence for dyeing/ textile working (Hall 1996; but see also approach to different lines of evidence for textile working at 16-22 Coppergate in Kenward and Hall 1995; Rogers 1997). These same deposits also produced a large numbers of nettle (*Urtica dioica* L.) seeds, which again may simply be a weed of cereal crops/ waste ground, but also is a useful plant. In particular, the high potash content of common nettle means that it could have been used as a source of lye, to assist cleaning of fleeces (e.g. discussion in Hunter 2005, 171–2).

Anglo-Norman charred and mineralised plant remains (see Table 2)

Sixteen samples were studied from Anglo-Norman (ca. 1066 - 1250 AD) deposits at SFQ. The majority were pits/ cess-pits (N = 12), but plant remains from a discrete burnt layer, a well, a floor layer and a post-hole were also studied. A wider range of tenements is represented (Tenements 167, 172, 173, 174, 179, 180, 237, 242 and 243). In total, 9149 identifications were made from these samples; 6294 or 69% of which were charred. The mineralised component (N = 2855 or 31%), however, encompassed a much wider range of taxa. Three waterlogged deposits were also studied from this phase at SFQ, but these will be discussed separately below.

The cereal crops cultivated remain largely the same; however, in addition to the barley, free-threshing type wheat and rye grains recovered from the Late Saxon phase of SFQ, cultivated oat (based on the identification of 14 floret bases in sample 138, context 4326 from Tenement 237) is also present in the charred assemblage. Broad bean, garden pea and indeterminate vetch/ garden pea also occur in this phase. The range of fruits and nuts; however, is greatly increased. In addition to charred hazelnuts, the Anglo-Norman samples also have produced charred indeterminate blackberry/ raspberry pips, elder seeds, grape pips, indeterminate sloe/ plum/ damson/ bullace stones, sweet cherry stones and strawberry seeds. A possible charred opium poppy (*Papaver* cf. *somniferum* L.) seed and a tentative identification of a charred garden parsley (*Petroselinum crispum* (Mill.) Nyman ex A. W. Hill) seed have been made in this phase. Mineralised fig (*Ficus carica* L.) pips, blackberry/ raspberry seeds, pear/ apple (*Pyrus* spp./ *Malus* spp.) pips and elder seeds have also been recovered. The weed/ wild plants recovered from the charred component of these samples frequently occur as weeds of crop. Many of the mineralised plants also occur as weeds of crop, but taxa specific to wetland habitats, such as sedge and rush seeds, only occur in the mineralised component of the Anglo-Norman samples. Although this may mean that domestic debris (floor coverings, thatch, etc...) may be entering the pits/ cesspits; it is also possible that this may be related to the incorporation of vegetative matter into the cesspits/ pits to keep them dry.

High Medieval charred and mineralised plant remains (see Table 3)

Nine samples were studied from the High Medieval (ca. 1250-1350 AD) deposits at SFQ; however, seven of these samples are from Tenement 237 and, therefore, these results are likely to be biased by the range of activities associated with this tenement. Three pits from Tenement 237 were studied, in addition a pit from Tenement 96, with abundant mineralised remains was also analysed. Three occupation deposits, a beam slot and a hearth were also analysed from Tenement 237. Finally, a sample from a pit from Tenement 177 and a sample from a burnt surface from Tenement 241 were studied. In total, 3505 identifications were made; 2339 (or 67%) were charred and 1166 (or 23%) were mineralised. In terms of cereal crops, the range of charred and mineralised plant remains identified from earlier periods remains the same, however, it is clear that free-threshing wheat is much more abundant, than other cereals. The data is biased to Tenement 237 remains, so may not necessarily reflect the full range of crops in use during the High Medieval period at SFQ. Notably, the range of weed/ wild taxa has greatly increased; these typically occur as weeds of cereal crops, several of which are typical of damp to wet conditions.

A pit from Tenement 177 and a burnt surface from Tenement 241 were also analysed. Tenement 237 and 241 samples produced abundant charred cereal remains with weed/ wild taxa, which typically occur as weeds of crop. Tenement 177 (sample 96); however, produced abundant mineralised remains, primarily of fruit (blackberry/ raspberry, elder fig, grape and sloe/ plum/ damson/ greengage). A possible mineralised quince (?*Cydonia oblonga* Mill.) seed was also recovered. Most notably, this sample has produced a fragment of a cumin (*Cuminum cyminum* L.) mericarp.

Late Medieval charred and mineralised plant remains (Table 4)

Two samples from Late Medieval deposits in Tenements 170 and 243 were studied. Cesspit sample 155 contains abundant mineralised plant remains, especially fig. A sample of a burnt layer (sample 182, context 8029) primarily contains charred cereal remains and accompanying weeds of crop, especially barley and free-threshing wheat, but also included broad bean, garden pea and indeterminate vetch/ garden pea. Fifteen charred mericarps have tentatively been identified as possible garden parsley (? *Petroselinum crispum* (Mill.) Nyman ex A. W. Hill) from this deposit; however, umbellifers (members of the carrot Family or APIACEAE) frequently do not survive charring well.

Post-Medieval charred and mineralised plant remains

One sample from a post-medieval phase of Tenement 237 was analysed. This sample produced a fairly even mixture of charred (N = 187) and mineralised (N = 175) plant remains. The charred component is primarily comprised of cereal (especially barley and free-threshing wheat type) grains and weed/ wild plant remains. The mineralised component is dominated by elder seeds, accounting for 84 of the 175 mineralised identifications made.

Hand-picked ?post-medieval/ ?modern Brazil nuts

Thirteen possibly desiccated/ possibly mineralised Brazil nut (*Bertholletia excelsa* Humb. et Bonpl.) shells (technically testa) were collected by hand in excavation of pit context 5010 in Tenement 180. Unfortunately, interpretation of the phase of this assemblage is problematic. A bulk soil sample from this deposit was not collected due to its late date (i.e. post-medieval). Pottery from the deposit dates to the 17th century; however, there are records of a greengrocer located in the area of this tenement in the early 20th century. The nutshells are often complete, with one or more prominent holes toward the centre of one face of the 3-sided testa. They do not have obvious evidence for gnawing, but the holes are broadly circular. These do not obviously appear to be nuts broken open with a 'nutcracker' or similar instrument, from which one would expect nutshells broken into halves or smaller fragments. Although, we cannot rule out someone extracting the Brazil nut through these holes, or possibly testing to see if they were spoiled, it is also possible that these Brazil nuts are part of a rodent's nest. Without other evidence,

especially from accompanying environmental remains (e.g. small mammal bones, insect remains, other plant remains, etc) it is not possible to determine the depositional history of these nuts.

Charred plant macrofossils

The archaeobotanical results from all thirty-four charred/mineralised assemblages studied from Late Saxon – Post-Medieval deposits at Southampton are compared on the basis of presence in Table 5. This allows trends in the data to be observed; however, the lower quantity of samples studied from Late Medieval – Post-Medieval phases at Southampton means that these phases are most likely biased and do not provide a complete reflection of the range of plants in use in these later periods. Nonetheless, it is interesting to see how closely the Anglo-Norman and High-Medieval assemblages match, especially given that many of the deposits are from pit/cesspit deposits and, therefore, archaeologically similar contexts. It is notable that this is not the case for the waterlogged/ mineralised component when results from SFQ are compared with other results from Southampton (see Tables 7–9 and discussion below), which show marked differences in the range and quantity of fruits and spices recovered over time (i.e. more limited access in the Saxon with increasing access and range from Anglo-Norman through High Medieval periods).

Waterlogged plant macrofossils from Anglo-Norman, High Medieval and Post-Medieval deposits

Table 6 presents the waterlogged/ mineralised archaeobotanical results for the 5 primarily waterlogged samples analysed from SFQ. These samples are all derived from pits, wells or cesspits and are some of the deepest deposits on site, which make explain their partial waterlogging. It is likely that they all contain mixtures of cess and other rubbish.

Anglo-Norman pit sample 159, which only produced 67 quantifiable remains, is of particular interest. This sample contained thousands of fragments of unidentified cereal bran, which is unquantifiable, and nearly 40% of the quantified plant remains were highly fragmented corncockle (*Agrostemma githago* L.) seed coat fragments. Cereal bran recovered from such deposits is frequently interpreted as remains of bread or other processed cereal products from human excrement (e.g. Hall *et al.* 1983; Carruthers 2005b, 184). Cereal bran was also relatively abundant in Anglo-Norman well sample 146; however, this sample included a large number of amorphous mineralised remains (N = 190). Mineralised remains and cereal bran from this feature both indicate the re-deposition of cess into this feature, if indeed, the feature was not itself converted into an outhouse at some late stage of its use. The final Anglo-Norman well sample (sample 150) did not produce bran, but contained abundant seed coat fragments of an unidentified CARYOPHYLLACEAE (N = 250 estimated whole seeds). These fragments were extremely minute (all < 0.2mm) and identification to species level was not possible. Notably this sample also produced 64 corn marigold (*Chrysanthemum segetum* L.) achenes. It is possible that this represents weeds of cereal crop. Mineralised sloe/ bullace/ damson/ greengage/ plum (*Prunus spinosa* L./ *domestica* ssp. *insititia* (L.) Bonnier & Layens) stone fragments and kernels were recovered from the heavy residue fraction of this sample, suggesting the possibility that cess was also deposited into this well.

High Medieval pit sample 48 produced bramble and elder seeds, which could be consumed foodstuffs deposited in cess, but also could result from these plants growing around an abandoned wellhead. The Post-Medieval cesspit produced a large quantity (N = 167) of strawberry pips, which are believed to be waterlogged but may be part-mineralised. However, since the seed coats were still flexible they were scored as waterlogged. Notably, mineralised sloe/ bullace/ damson/ greengage/ plum (*Prunus spinosa* L./ *domestica* ssp. *insititia* (L.) Bonnier & Layens) stone fragments and kernels and grape (*Vitis vinifera* L.) pips were also recovered.

Discussion

The archaeobotanical assemblage analysed from Southampton French Quarter slightly overlaps with the bulk of published archaeobotanical analyses from Southampton, which primarily date to the Saxon phases of the city (*Hamwic*). In addition to Late Saxon plant remains, however, there is material from Anglo-Norman, High Medieval, Late Medieval and Post-Medieval deposits. Unfortunately, no secure Early Medieval deposits were encountered during excavations. The overall impression gained from this analysis is of remarkable stability of plant use between the Late Saxon and High Medieval Periods and the main categories of cereals and pulses; however, these are primarily represented through the charred component of the assemblages. The range and quantity of fruits, nuts and spices appears to be quite limited in the Saxon period at SFQ, and gradually increases over time. The various types of plant remains recovered, and archaeobotanical finds of note, will be briefly reviewed below. In addition, these results will be compared to other published results from Late Saxon, Anglo-Norman and High Medieval sites in Southampton. Only a few Late Medieval – Post-Medieval samples were studied and, therefore, these results are unlikely to be representative of the full range of activities taking place and/or foodstuffs in use on site.

There are several issues that are worth further discussion in more detail below. The recovery of abundant fruit and nut remains from pits/ cess-pits, however, is well-known for Southampton and this seems to continue to be the case at SFQ. One hand-picked collection of plant remains from a putatively Post-Medieval (although possibly intrusive Early Modern debris) has produced Brazil nut (*Bertholletia excelsa* Humb. Et Bonpl.) nutshells (testa), which although not derived from a general biological sample, and certainly in isolation, is worth mentioning in terms of its significance and also in terms of methodology. None of the deposits studied are likely to be primary, even the cesspits appear to contain materials from a number of different sources. Differential preservation and the multiple routes of incorporation of plant remains into these features (especially pits, cess-pits and wells) is of particular interest in terms of the methodology of analysing such samples, as well as interpreting such assemblages. The weed flora recovered closely matches that of other studies in Southampton and suggests a mixture of crop weeds, hay and domestic rubbish (e.g. floor litter, thatch, bedding, etc...) were also incorporated into these features. The recognition of dye-plants and flavourings, for example, is particularly difficult, since many also have any number of other uses and/or occur as weeds.

Comparison of results at Southampton French Quarter by phase

Cereals and pulses

Late Saxon deposits include barley (*Hordeum* sp.), rye (*Secale cereale* L.) and free-threshing type wheat (*Triticum* sp.) grains. Broad bean (*Vicia faba* L. var. *minor*) and indeterminate vetch (?cultivated)/ garden pea (*Vicia* spp./ *Pisum sativum* L.) also are recovered. These crops continue in later phases at SFQ, but from the Anglo-Norman period cultivated oat (*Avena sativa* L. – identification based on well preserved floret bases) is recovered, usually in fairly small quantities. No cultivated oat is recovered from post-medieval phases at SFQ. However, one High Medieval sample (pit sample 143, from Tenement 237) produced 118 charred possible cultivated oat grains and six securely identified charred cultivated oat floret bases. From the Anglo-Norman period onward, secure identifications of garden pea (*Pisum sativum* L.) occur frequently, but like the Late Saxon period, only small numbers of pulses are recovered in any mode of preservation at SFQ.

Cereal Chaff

Notably rachis nodes of any of the cereals discussed above are relatively scarce; however, culm nodes (the articulations along the stalk of a cereal plant) are frequently recovered, suggesting that straw was a material frequently in use on site. Obviously, thatching, bedding, matting and basketry utilising cereal

straw would be quite typical of Late Saxon – High Medieval settlement. However, unquantifiable cereal straw fragments (often without the quantifiable feature of a culm node) were frequently noted in the mineralised component of pit and cess-pit samples. Carruthers (2005a, 161) has suggested that cereal straw, as well as rush and sedge stems, would have been used in pits, especially cess-pits, to soak up liquid and, possibly, damp down odours.

Germinated Grain and Detached Sprouts

Small quantities of germinated cereal grain and detached sprouts (coleoptiles) and embryos are recovered from nearly all of the SFQ archaeobotanical samples; however, four samples (Anglo Norman post hole sample 198 and floor layer sample 193 and High Medieval occupation layer/ deposit samples 101 and 102, from Tenement 237) have produced relatively rich assemblages of detached sprouts (N = 87 - 500 detached coleoptiles). Detached cereal grain sprouts either indicate spoiled or intentionally malted grain (e.g. van der Veen 1989). Malted grain (the intentional germination of cereal grain, usually barley, which is then arrested through heating grain – e.g. Corran 1975) is the prime ingredient for the manufacture of ale (beer without flavouring from hops). A key stage in some malting processes was the removal of the ‘roots’ or ‘rootlets’ (i.e. the sprouts or coleoptiles) from the dried malt product, just before brewing. (e.g. Briggs 1998, 8 and 10; Glamann translated by French 2005, 23). The ubiquitous recovery of charred germinated grain and detached sprouts (coleoptiles) at SFQ, albeit usually in very small quantities, does suggest small-scale brewing is possible in this area of Southampton during the Anglo-Norman through High Medieval periods.

Small-scale ale brewing is well documented in England, and there is evidence for increasing concentration of whole-sale ale manufacture in urban centres such as Southampton (Bennet 1996, 46). In addition, kiln floor tiles typically associated with malting kilns have been recovered from Early through High Medieval contexts at SFQ (see Specialist Download Report F5). Notably, 61 hearth tiles and 5 kiln floor tiles are associated with High Medieval phases at Tenement 237 where large quantities of charred, detached sprouts (sample 101 N = 180 from a 1/16th sub-sample of a flot (=0.3 L sample) and sample 102 N = 87 from 100% of a flot from a 20L sample) were recovered. It is likely that the abundance of charred, detached sprouts in association with hearth and kiln floor tiles in the High Medieval phase at Tenement 237 is linked to regulated production of ale. By the 16th century guilds would have controlled brewing in Southampton (Bennet 1996, 50). Post Medieval and Early modern brewing is documented at this tenement - a brewhouse was included in the inventory of possessions of tenement resident John Combes in 1661 and by 1881 the Hampton Court Brewery occupied part of the site. The recovery of archaeobotanical and ceramic building material evidence for brewing at Tenement 237 suggests that brewing has occurred in this area of Southampton since at least the High Medieval period.

Fruit

Late Saxon fruit remains are restricted to relatively small assemblages (<30 identifications and frequently no identifications) of elder (*Sambucus nigra* L.) seeds. Elder seeds can be collected and are a useful fruit or dye plant, but are also a source of food for animals (birds, rodents, etc...) and frequently occur in waste places (e.g. Hall 1996, 635; 2000, 32), possibly now slightly out-competed by *Buddleja* (butterfly bushes – a plant of Chinese in origin introduced in the 18th and 19th centuries Campbell-Culver 2001) in our urban environments. However, as will be seen in the discussion comparing the Saxon remains to other finds elsewhere in Southampton, a much wider range of fruits are known for the Middle–Late Saxon periods, including blackberry (identification varies but includes *Rubus fruticosus* L. agg., *Rubus* section *Glandulosus* Wimm. & Grab., *Rubus* section *Rubus* – blackberry and raspberry plants can interbreed easily (e.g. summary in Stace 1997, 330) and, therefore, separation of the plants on the basis of the morphology of their pip is not straightforward), cherry (*Prunus avium* (L.) L/ *cerasus* L.), fig (*Ficus carica* L.), grape, variously indeterminate bullace/ damson/ greengage/ plum, indeterminate pear/ apple

(*Pyrus* spp./ *Malus* spp.) and raspberry (*Rubus idaeus* L.). Certainly from the Anglo-Norman period onward all of these fruits are recorded frequently at SFQ, with the addition of wild/ alpine strawberry (*Fragaria vesca* L.) from the Anglo-Norman period.

The level of identification of primitive varieties of plums is not straightforward (e.g. Greig 1996, 215–16), certainly separation of sloes (*Prunus spinosa* L.) from early varieties of bullace/ damson/ greengage/ plum is technically difficult (Pollman *et al.* 2005), especially if the stones are rounded (possibly through mechanical damage during consumption and/or digestion). Poorly preserved, highly rounded plum stones have been recovered from Roman Eschenz (vicus *Tasgetium*) in Switzerland (see especially Figure 3 in Pollman *et al.* 2005, 1476), which are closer in appearance (especially size and shape) to cherries than plums, especially when the prominent ridges of sloe/ smaller plums (e.g. bullace or damson) are damaged or not well preserved. Moreover, there clearly is imprecision in the use of ‘plum’ in English, since even the Oxford English dictionary suggests that it can also be applied to raisins (dried grapes - *Vitis vinifera* L.) as well as various members of the genus *Prunus*. Notably plum pudding was initially a savoury fruit bread, often served with beef and eaten year-round (Ayto 1994). Perhaps the wide range of sizes and shapes of *Prunus* fruit stones recovered at Southampton reflects a similarly loose treatment of the various species and sub-species of *Prunus* in Medieval culinary practice at SFQ.



Plum (*Prunus domestica* L. type) large-sized stones



Variously indeterminate plum/ greengage/ bullace/ damson (*Prunus domestica ssp. insititia* (L.) Bonnier & Layens) smaller-sized fruit stones

There is some question as to whether all of the fruit was cultivated locally. Certainly, grape and plums can happily produce fruit with seeds in Britain, but there clearly is also a long tradition of trade with the continent (e.g. discussion of origin of plums from the Mary Rose in Smith and Green 2005). Indeed, the origin of our word ‘*raisin*’ in English is believed to be from the French word for grape – and is likely to be a reflection of the trade in dried fruit between mainland Europe and the British Isles. Although grapes and various plum species can be cultivated successfully in Britain, there remains some question as to whether figs could have been grown successfully in the past and most view fig as an import, most likely as a dried fruit (Dickson and Dickson 1996). Roach (1985) has suggested that apples were most likely cultivated in the British Isles before the Norman Conquest. Certainly van der Veen and colleagues (2007a, 205; 2007b, 13) have recently suggested that it was a Roman introduction, and apples clearly thrive in the British climate so there is no reason to presume they are not of British origin.

Nuts

Hazel nut (*Corylus avellana* L.) was recovered from all phases at SFQ, but typically in very low numbers. A few walnut (*Juglans regia* L.) shell fragments have been recovered from two of the High Medieval samples (samples 51 and 143) at SFQ. Possible almond (cf. *Prunus amygdalus* Batsch.) nutshell fragments have also been recovered from High Medieval sample 48 (a waterlogged pit deposit).

Post-Medieval or Early Modern Brazil nuts (*Bertholletia excelsa* Humb. Et Bonpl.)

One hand retrieved assemblage of nutshells was collected from a 17th century garderobe from the gatehouse to Polymond Hall (context 5010, Tenement 180). However, this tenement was used in the early 20th century as a greengrocer and the possibility cannot be ruled out that the Brazil nutshells are a subsequent intrusive deposition (i.e. deposition by rats) into an otherwise 17th century fill.



Brazil nut (*Bertholletia excelsa* Humb. et Bonpl.) shells (testa).

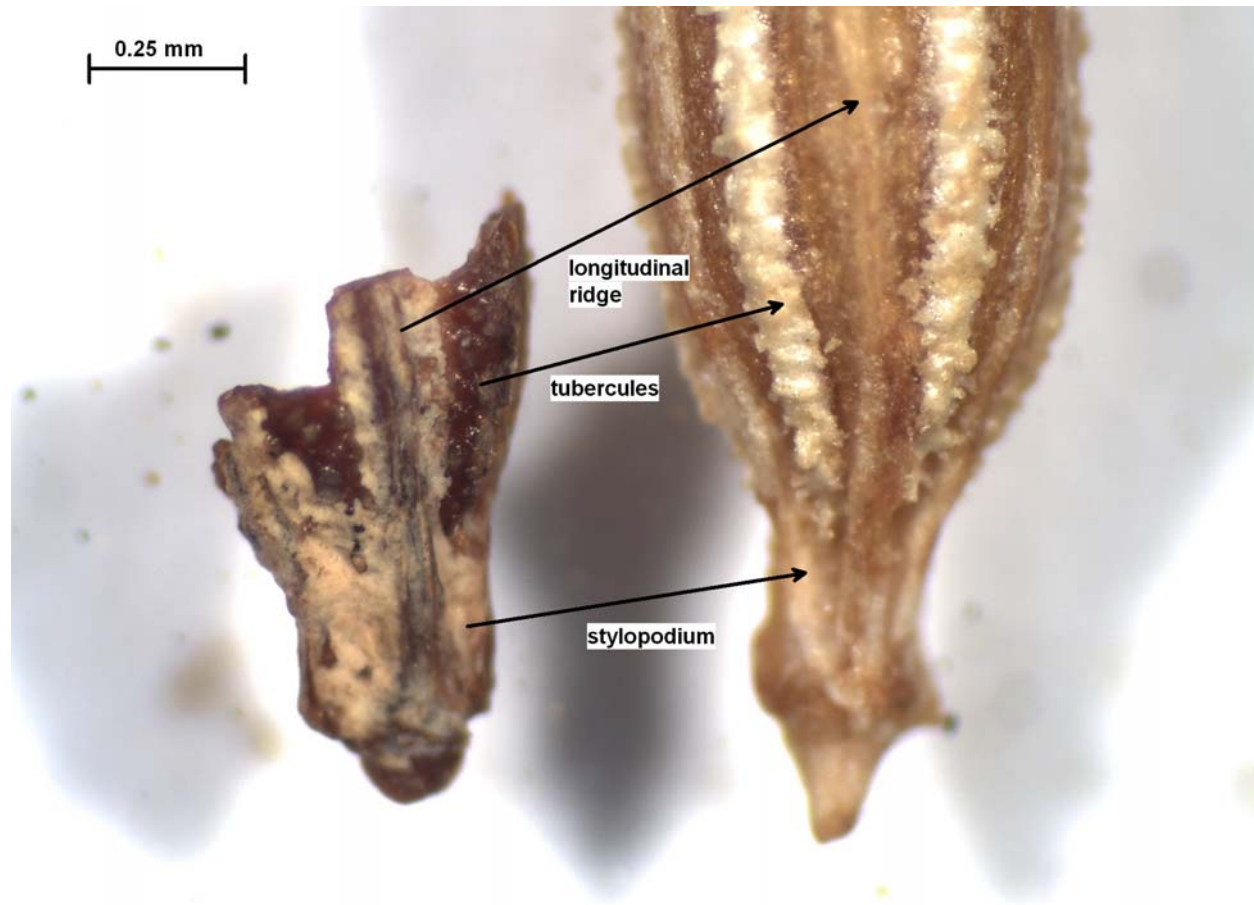
Brazil nut (*Bertholletia excelsa* Humb. et Bonpl.) grows in South America (particular the Amazon basin, especially Guyana) and has only previously been recovered from Post-Medieval deposits in London (Giorgi 1999). Brazil nuts are not nuts at all; the fruit of the Brazil nut tree is, in fact, similar to a coconut, with a woody outer shell (Prance and Mori 1990). The ‘nuts’ are actually the seeds of the fruit, which happen to have a hard, wrinkled, woody outer seed coat (testa). The tree is one of the tallest in the Amazonian rain forest canopy reaching heights of 30-45m. Brazil nut trees naturally occur only where there is a dry season of 5-6 months duration and in non-flooded ground. They have only rarely been successfully grown as a plantation crop and, in the main, are still collected from the wild by indigenous peoples of the Amazonian basin. The fruit of the Brazil nut trees takes 15 months to mature, producing between 10 to 25 seeds and are usually harvested from the forest floor during the wet season (December to March) (Prance and Mori 1990). The seeds are ~65% oil (or fat) and have one of the highest fat contents of any ‘nut’ consumed and, therefore, can go rancid quickly. As a result, they cannot be stored for long and are best stored in cool (eg refrigerated), dark conditions (not easily achieved, even in the 18th and 19th centuries) (Prance and Mori 1990). Unfortunately, a bulk soil sample from this feature was not collected during the course of excavations and, therefore, we only have this limited insight into the deposit and are unable to gauge whether the Brazil nuts are intrusive 20th century material or a primary 17th century deposit.

Other Economic Plants

A small quantity of other economic plants have been recovered from SFQ. A few flax/ linseed (*Linum usitatissimum* L.) seeds have been recovered. Although grown as a fibre crop (using stems) or oil seed (e.g. Bond and Hunter 1987), it is also possible that linseeds were added to bread to enhance flavour or for decoration (e.g. Hall 2000, 29).

An extremely tentative identification of charred seeds of garden parsley (? *Petroselinum crispum* (Mill.) Nyman ex A. W. Hill) has been made from Anglo-Norman and Late Medieval deposits at SFQ. Garden parsley may have been grown for seed, but is more likely to have been grown for foliage; therefore, this identification should be treated with some caution. Further, more secure, results are necessary before we can say garden parsley seeds are used in Anglo-Norman/ Medieval times with any confidence. Finds of garden parsley are relatively common on mainland Europe (Greig 1996, 225) and, the ‘French’ character of the area may possibly suggest more European style tastes in food.

A few warped and/or slightly fragmented seeds which compare favourably to opium poppy (*Papaver cf. somniferum* L.) seeds were identified from Anglo-Norman levels at SFQ in the charred and waterlogged components. As Hall (2000, 29) points out, opium poppy seeds are likely to have been used to decorate/flavour breads and other baked goods; however, they frequently escape cultivation, quickly establishing as a weed, and prolifically produce seed.



Mineralised cumin (*Cuminum cyminum* L.) mericarp fragment (on left) and modern cumin seed on right.
 (N. B. Colouring on mineralised material is the reverse of that seen on modern material - e.g. tubercles are red on High Medieval cumin fragment and white of modern comparative seed).

A mineralised fragment of a cumin (*Cuminum cyminum* L.) mericarp was recovered from High Medieval pit sample 96 in Tenement 177. This sample contained the largest concentration of mineralised plant remains and amorphous mineralised concretions, which most likely are derived from cess. Cumin is recorded in historic documents and recipes from the medieval period (Greig 1996), but to date this is the only known archaeobotanical find of cumin. There is a record from 1307 for the payment of 11lb of cumin in rent by a Walter Upryt for the nearby High Street Tenement 169. Cumin is a spice that frequently is ground before use and like many umbellifers is extremely fragile, so unlikely to survive charring. However, there are historical records for the use of cumin for cooking (e.g. Mead 1967, 71; Pynson 1500) and, indeed, maintaining flaxen hair colour (The Tudors website: <http://www.the-tudors.org.uk/tudor-hair.htm> –consulted 5 January 2009).

The weed/ wild plants

The weed/ wild plants are of interest primarily because as a whole they are essentially similar between Saxon and High Medieval phases of occupation at Southampton. Certainly, there appears to be consistent recovery of weeds of cereal crops, plants typical of grassland/ meadow and plants possibly of use domestically (e.g. floor litter, thatch, bedding, etc...). There is great debate in the literature about the sources of these weed/ wild plants; much of which revolves around the habitats they typically occur in and what they may imply for the sources of cess/ non-cess material recovered from these deposits (e.g. Greig, 1981; Hunter 2005, 172).

Taphonomy: origins and pathways of Southampton's cess

In her discussion of the mineralised plant remains from Mid-Saxon St. Mary's Stadium, Southampton, Carruthers (2005a, 157) suggested that cess deposits were either concentrated or dilute and could be either primary or re-deposited. This is also likely to be the case at SFQ. Certainly samples never exclusively produced just charred or just waterlogged plant remains, mineralised plant macrofossils and insects (primarily Diptera –see SOU1382 Download Report E9) were usually present as well. The mixture of a number of different modes of preservation suggests that a number of possible sources of material exist for these 'cess' and 'rubbish' deposits; however, in some cases it was apparent that mineralisation was not complete (i.e. waterlogged endocarp and mineralised embryos were present in the same seed, this phenomenon was also observed at London City ditch, unpublished data in Carruthers 2005b, 184).

James Greig's (1981) seminal examination of deposits associated with a partially preserved medieval barrel-latrine in Worcester explored the myriad of possible 'pathways' in which plant remains (and other environmental remains) may be incorporated into an assemblage; clearly demonstrating how the mundane (environmental analysis of cess) can support complicated reconstruction of past diet, activities and, indeed, 'lifeways'. Food waste, excrement, domestic rubbish (e.g. floor litter, hearth sweepings, used bedding, etc...) and potentially wastes associated with domestic livestock (manure, litter, waste food, etc...) are all possible sources of material to be incorporated into cesspit/ pit deposits in the urban context (e.g. Greig 1981, 278–9, Figures 5–6). Their recovery in one limited deposit establishes the movement of a great deal of material in and around the urban environment. In other words, Medieval Worcester was 'clothed' – Greig (1981) demonstrated that the environment would have included a mixture of habitation, garden plots and animal pens – the waste from which would have been moved in and around the urban environment and possibly ultimately deposited in an urban garden or further away, in an arable field as night soil collected by the medieval 'dong farmer'. Today we are cocooned from the necessities of deeply contemplating what happens to our domestic waste. Our domestic rubbish is regularly collected and a simple flush deals with other matter. Processing of cess is now located safely away from most urban environments (although quite obviously by smell), often well away and downwind of communities; nevertheless, 'waste management' remains a major industry and sterilised waste products (treated sewage sludge) continue to be used to this day, especially as fertilisers (e.g. Dhir *et al.* 2001).

Mineralisation is likely to be some form of phosphate (PO_4) or calcium-phosphate ($\text{Ca}(\text{PO}_4)_6(\text{OH})_2$) replacement (e.g. Green 1979), although proximity to metal objects cannot be ruled out in some cases. Mineralised fly (Diptera) puparia were frequently recovered in large quantities at various stages between pupa to adult (see SOU1382 Download Report E9). This suggests that mineralisation was rapid, possibly as a result of adding something caustic to the cess/ rubbish pit – such as lye. The result is a flash preservation, which produces highly variable or even partial mineralisation of seeds, from well preserved with many diagnostic features to plant remains, which are largely indeterminate amorphous fragments. D. Smith's analysis of the flies suggests that this was a very fluid environment and one can imagine that as temperatures begin to rise in the Spring/ Summer such conditions would rapidly have become extremely foul. It seems likely that mineralisation is a direct artefact of attempts to have good hygiene at Southampton French Quarter.

Comparison with other results from Southampton

Tables 7–9 present comparison of the Late Saxon, Anglo-Norman and High Medieval results from Southampton French Quarter with those from other areas of the city. The comparison can only be made on presence because in several cases the plant remains were not fully quantified. In addition, it was not always clear how the plant remains were preserved and, therefore, some assumptions have been made (however this is indicated in the tables).

The Saxon reports that are published include a number of older reports, which do not have very comprehensive lists of weed/ wild plants. As a result, only the economic plants are compared for the Late Saxon period. The range of cereal crops recovered in the charred assemblage is broadly similar elsewhere (e.g. Melbourne Street and Anderson's Road); however, both of these sites also have indeterminate wild/ cultivated oat present. Peas/ beans are present but in relatively low numbers; however, this is likely to be a factor of preservation (pulses are known to be under-represented in the archaeobotanical record – e.g. discussion of lack of pulses in Worcester barrel-latrine Greig 1981, 281) and possibly also due to the lack of recognition of highly fragmented material (mineralised testa of pulses are often difficult to recognise – e.g. Carruthers 2005a, 161). Although the range of fruits is limited for SFQ to just fig and elder in the Late Saxon period, elsewhere at Southampton blackberries, cherries, crab apple, grape, elder, plums (including bullace/ damson/ greengage) and raspberries have been identified from Saxon deposits. In terms of flavouring only a few dill (*Anethum graveolens* L.) seeds are known from St. Mary's Stadium (Mid-Late Saxon phase only). Those weed/ wild plants reported for Late Saxon phases of Southampton include a broadly similar range of crop weeds, plants of grassland/ meadows and weeds of waste places to that recovered from SFQ.

The Anglo-Norman assemblage can only be compared against one sample studied by Green (1986) from Southampton Castle ditch (Upper Bugle Street) (see Table 8). The SFQ material is dominated by charred plant remains, whereas only a few cereal grains and accompanying weeds of crop were preserved by charring at Southampton Castle. The range of fruits recovered is broadly similar; however, the weed/ wild flora is markedly different. This may reflect the specific context studied from Southampton Castle – a ditch – which is likely to include waste/ wayside plants which otherwise would not occur in the densely populated tenements of SFQ.

Like the Anglo-Norman, the ten High Medieval samples from SFQ have abundant charred plant remains, which are not represented at other High Medieval deposits at Quilter's Vault, Cuckoo's Lane/ High Street B & C sites (see Table 9). This is also the case for waterlogged plant remains; however, due to lack of specification it was not possible to ascertain how material was preserved at Cuckoo Lane/ High Street B & C (Dimbleby 1975). The range of fruits recovered is broadly similar, although cherry, raspberry and strawberry are also identified at Cuckoo Ln./ High Street B & C). The recovery of a fragment of cumin from Tenement 177, is unique to the British Isles, let alone Southampton (see discussion above); however, it does illustrate that we are only recovering a portion of the plant component of ancient diet and has methodological implications (see discussion below). There is variation in the weed/ wild taxa – but given the limited numbers of samples discussed here it is not possible to ascertain if this represents different inputs into these deposits or possibly different depositional histories (e.g. seeds from wasteland plants overgrowing these features after they fall out of use). Comparison on a context by context basis with further general biological samples from later phases of Southampton's occupation should be a research priority.

Differentiating wild from useful plants

Several of the plants recovered from SFQ could be cultivated and/or collected or may simply occur as weeds of crop. Weld (*Reseda luteola* L.) and many of the berries (e.g. blackberry and elder) recovered from SFQ can be used as dye plants, but also occur in waste places and are prolific seed producers (e.g. discussion in Hall 1996, 635–6). Useful flavourings from the cabbage family (e.g. black mustard –

Brassica nigra L. or white mustard - *Sinapis alba* L.) belong to genera where even if the seed is well-preserved, distinguishing cultivars from weedy varieties is problematic (e.g. discussion in Carruthers 2005a, 162). Other plants such as opium poppy (*Papaver somniferum* L.) or linseed/ flax (*Linum usitatissimum* L.) may have been used as flavourings, especially on breads/ cakes; however, they are cultivated for other reasons and certainly opium poppy is a frequent escape from cultivation/ gardens (e.g. discussion in Hall 2000, 29). As a result, these taxa have been classified as weed/ wild plants for this report, in the absence of other corroborating evidence for other uses (e.g. culinary/ medicinal/ textile/ etc) from these deposits

Approaches to mineralised urban assemblages

Assessment on the basis of the flot alone will not accurately reflect any mineralised component in the heavy residue fraction. Indeed, SFQ produced flots with abundant mineralised remains and flots with no mineralised remains, but abundant mineralised remains in the heavy residue fraction. As a result, it is always advisable to assess both the flot and heavy residue together, when selecting samples for further analysis. Carruthers (2005a, 157) recommends that both the flots and heavy residues are sorted under a low-power microscope and the SFQ material frequently contained mineralised plant remains not obviously visible to the naked eye. Moreover, it is clear that even well preserved mineralised plant remains may appear unrecognisable to the inexperienced. In the case of the SFQ material, an assistant who was working with mineralised material for the first time, had great difficulty recognising mineralised plant remains, although she had several months experience working with charred plant remains. As a result, it is always advisable to have sorting of such mineralised urban material carried out by experienced personnel. It is also advisable to have sorted flots/ heavy residues scanned by an experienced archaeobotanist if this work is assigned to an assistant, especially to ensure that poorly preserved material is recognised and recorded.

Differential preservation has been handled differently at SFQ than at St. Mary's Stadium (Carruthers 2005a, 2005b; Clapham 2005; Hunter 2005). At St. Mary's Stadium separate specialists were assigned specific modes of preservation, resulting in three separate reports with very little overlap. Admittedly my observations are particular to SFQ, but it was clear that two to three modes of preservation were present in all 39 samples fully analysed and in many of the samples assessed. As a result of this experience, it seems preferable to approach samples as whole assemblages and to report their finds together, so that it is clear that a single cess-pit deposit, for example, is producing both mineralised and waterlogged plant remains. The implications of differential preservation will need to be addressed on a case by case basis, obviously; however, at SFQ it was apparent that mineralisation was never complete and certainly in the waterlogged component, as was also noted at London City Ditch (Carruthers 2005b, 184 citing unpublished results) seeds had both mineralised (frequently the embryo) and waterlogged (frequently the outer seed coat) material preserved.

Finally, there is the issue of when does 'archaeology' end. As archaeologists, it may be time to reconsider our opinion on the sampling and analysis of post-medieval environmental remains. Sampling of post-medieval environmental remains is frequently not undertaken on archaeological sites, yet data from the 17th centuries and 18th centuries is now well over 200/300 years ago and reflects access to trade contacts throughout the New World. Who had access to these new foods and useful plants? How were they utilized? Are these questions truly addressed by the historic record (e.g. Greig 1996)? The tantalizing recovery of hand-collected Brazil nuts from Southampton is a cautionary tale. This deposit, which was within a wardrobe and clearly likely to be cess/ domestic waste, was not sampled primarily because it was considered 'too late' to be archaeology. A site archaeologist and an environmental assistant were certain this was unusual and at least hand-collected the obvious 'nut shells'. This at least ensured that there was archaeobotanical consideration of this deposit. The question as to what else was with this deposit will remain unanswered? The recovery of straw, gnawed nutshells and rodent bones may have helped to establish that these remains were re-deposited into this feature as part of a rodent's nest.

However, the recovery of other exotic foodstuffs and mineralised plant remains in association with the Brazil nuts may have helped to build the case that they were indeed 17th century in date.

Conclusions

The assemblage recovered from Southampton French Quarter greatly extends our understanding of diet in Late Saxon, Anglo-Norman and High Medieval Southampton. Previous published archaeobotanical work has largely focused on Saxon material, although unpublished results from Medieval (as well as Saxon) phases are in preparation (pers. comm. G. Campbell, ref. Biddle n.d., Green n.d. and Monk n.d.). Van der Veen and colleagues (2007a, 203) have recently suggested that 30 archaeobotanical samples per phase of a site would be a rough guideline of minimum number of samples to be representative for Roman sites. Whether 30 samples adequately reflect the full range of the plant component of past diet and use within specialised industries for a large urban centre, however, is debatable. Certainly unpublished data from Biddle (n.d.), Green (n.d.) and Monk (n.d.) greatly extend the number of crops known to be in use at Southampton, suggesting that regular collection of environmental samples and their analysis is still necessary to fully appreciate the range of plants available as food or for other activities. Regardless, at present only Saxon deposits at Southampton (*Hamwic*) are well sampled with over 30 samples studied from Middle Saxon and Late Saxon phases (see Table 7 and also Carruthers 2005a, b; Clapham 2005 and Hunter 2005.). Material from Early Saxon and earlier phases of Southampton's occupation remain relatively scarce, as does material from High Medieval and Post-Medieval phases.

Tantalizing recovery of exotica, such as the High Medieval cumin (*Cuminum cyminum* L.) from a highly mineralised pit deposit or the Post-Medieval/ Early Modern Brazil nut (*Bertholletia excelsa* Humb. Et Bonpl.) nutshell fragments attest to Southampton's strong overseas contacts as one of Britain's major ports. Certainly figs (*Ficus carica* L.) are also likely to have been imported and it is possible that grapes and plums also were imported. Dried fruits are important ingredients with strong flavoured meats, adding sweetness to otherwise savoury dishes. Perhaps these fruits, along with limited recovery of spices (e.g. cumin and garden parsley at SFQ, but caraway, coriander, dill, fennel and lovage have also been recovered – e.g. Biddle n.d.; Clapham 2005; Hunter 2005) suggest that diet may not necessarily have been as bland or monotonous as we might think. The use of black mustard (*Brassica nigra* L.) or opium poppy (*Papaver somniferum* L.) as flavourings is more problematic to establish because these plants can simply occur as weeds in urban or agricultural environments.

Finally, the most notable result is the consistently abundant recovery of fruits in Saxon – High Medieval deposits at Southampton. Today fruits such as sloe and bullace/ damson/ greengage and some primitive varieties of plum are considered bitter to modern tastes; however, this may not have been the case before people had regular access to sugar (e.g. Hall 2000, 31) and indeed, acidic fruits when dried (e.g. by kiln drying) are made much more tasty, even by modern standards (e.g. Wiltshire 1995). The inclusion of dried fruit such as figs, damsons or raisins to meat dishes would provide depth and subtlety of flavour to lift even the blandest knuckle of mutton. Pickling/ preserving is a somewhat lost art these days, but slow-cooked, simmered down fresh fruits carefully stored in airtight containers can greatly extend the 'season' of fresh fruits and can provide concentrated bursts of flavour to meals. Heaven is a nice piece of ham and some of Professor Susan Limbrey's home-made damson chutney, sweetened with just a dash of her wonderful honey (pers. obs. David and Wendy Smith). Although one is tempted to view Saxon/ Medieval diet as endless rounds of peas porridge (e.g. discussion of abundant pulses at St. Mary's Stadium in Carruthers 2005a, 162), perhaps there also is scope to envision nourishing and tasty fruit-enriched stews or cold cuts of meat whose flavour is lifted with some accompanying fruit-pickles. Greig (1996) has argued that spices are present in Late Saxon – Post-Medieval Britain; certainly they are documented. Their recognition archaeologically, as well as that of other rarely recovered vegetative remains such as leaf or root vegetables, relies on sampling appropriate contexts, careful processing, and high quality sorting, in order to achieve any benefits of analysis of macrofossil remains by experienced specialists.

Acknowledgements

I am thankful to Gill Campbell (English Heritage) for providing access to unpublished reports on archaeobotanical material from Southampton by Brian Biddle, Frank Green and Mick Monk. I am hugely indebted to Wendy Carruthers for going through a selection of the Southampton French Quarter mineralised material with me and for demonstrating some of the identification criteria for embryos/ seed coats from her own archaeological comparatives. I would like to thank Gill Campbell, Wendy Carruthers, Alan Clapham and Allan Hall for confirming the identification of cumin. I am most grateful to Cynthia Poole (Oxford Archaeology South) for discussing her malting kiln floor tile finds at SFQ with me. Any faults within this report are, of course, my own.

References

- Ayto, J. 1994. *A Gourmet's Guide: Food and Drink from A to Z*. Oxford: Oxford University Press.
- Bennett, J. M. 1996. *Ale, Beer and Brewsters in England: Women's Work in a Changing World, 1300-1600*. New York: Oxford University Press.
- Biddle, B. n.d. *A Comparison of the Plant Remains from Archaeological Excavations in Southampton, with Special Reference to the Seeds*. Unpublished manuscript supplied by Gill Campbell, Centre for Archaeology, English Heritage.
- Bond, J. and Hunter, J. 1987. Flax-growing in Orkney from the Norse Period to the 18th Century. *Proceedings of the Society of Antiquaries of Scotland* 117: 175-181.
- Briggs, D. W. 1998. *Malts and Malting*. London: Blackie Academic and Professional.
- Buckland, P. C.; Holdsworth, P. and Monk, M. 1976. *The interpretation of a group of Saxon pits in Southampton*. *Journal of Archaeological Science* 3: 61-69.
- Cambell-Culver, M. 2001. *The Origins of Plants: The People and Plants that have shaped Britain's Garden History since the Year 1000*. London: Headline.
- Carruthers, W. 2000. The mineralised plant remains, pp. 67-75, in A. J. Lawson (ed.) *Potterne 1982-5: Animal Husbandry in Later Prehistory Wiltshire*. (Wessex Archaeology Report 17.) Salisbury: Wessex Archaeology.
- Carruthers, W. 2005a. Mineralised plant remains, pp. 157-163, in V. Birbeck, R. J. C. Smith, P. Andrews and N. Stoodley (eds). *The Origins of Mid-Saxon Southampton: Excavations at the Friends Provident St Mary's Stadium 1998-2000*. Salisbury: Wessex Archaeology.
- Carruthers, W. 2005b. The plant remains: comparing and contrasting the assemblages, pp. 183-185, V. Birbeck, R. J. C. Smith, P. Andrews and N. Stoodley (eds). *The Origins of Mid-Saxon Southampton: Excavations at the Friends Provident St Mary's Stadium 1998-2000*. Salisbury: Wessex Archaeology.
- Clapham, A. 2005. Waterlogged plant remains, pp. 173-181, in V. Birbeck, R. J. C. Smith, P. Andrews and N. Stoodley (eds). *The Origins of Mid-Saxon Southampton: Excavations at the Friends Provident St Mary's Stadium 1998-2000*. Salisbury: Wessex Archaeology.
- Corran, H. S. 1975. *A History of Brewing*. Newton Abbot and London: David and Charles.
- Dhir, R. K.; Limbachiya, M. C and McCarthy, M. J. (eds.) 2001. *Recycling and Reuse of Sewage Sludge: Proceedings of the International Symposium organized by the Concrete Technology Unit and held at the*
-

University of Dundee, Scotland, UK, March 19-20, 2001. Reston, Virginia: American Society of Civil Engineers.

Dickson, J. H. and Dickson, C. 1996. Ancient and modern occurrences of common fig (*Ficus carica* L.) in the British Isles. *Quaternary Science Reviews* 15: 623–633.

Dimbleby, G. W. 1975. The seeds, pp. 344–6, in C. Platt and R. Coleman-Smith (eds) *Excavations in Medieval Southampton. Vol. 1: The Excavation Reports*. Leicester: University Press.

Giorgi, J. 1999. Archaeobotanical evidence from London on aspects of post medieval urban economies, pp. 342-348 in G. Egan and R L Michael (eds) *Old and New World*. Oxford: Oxbow Books.

Glamann, K. translated by G. French. 2005. *Beer and Brewing in Pre-industrial Denmark*. Odense: Syddansk Universitetsforlag.

Greig, J. 1981. The investigation of a Medieval barrel-latrine from Worcester. *Journal of Archaeological Science* 3: 265–282.

Greig, J. 1996. Archaeobotanical and historical records compared – a new look at the taphonomy of edible and other useful plants from the 11th to the 18th centuries A.D. *Circaea* 12: 211–247

Green, F. 1979. Phosphatic mineralization of seeds from archaeological deposits. *Journal of Archaeological Science* 6: 279–284.

Green, F. 1986. The archaeobotanical evidence from the castle ditch, pp. 45-46, in J. Oxley (ed.) *Excavations at Southampton Castle*. Southampton: Southampton City Museums.

Green, F. 1992. An analysis of faecal samples from SOU 18, microfiche 1: E3, in A . D. Morton (ed.) *Excavations at the Hamwic. Vol. 1: Excavations 1946-83: excluding Six Dials and Melbourne Street*. (Council for British Archaeology Research Report 84). York: Council for British Archaeology.

Green, F. n.d. *The Medieval Remains from the Port of Southampton*. Unpublished manuscript supplied by Gill Campbell, Centre for Archaeology, English Heritage.

Hall, A., Jones, A. and Kenward, H. 1983. Cereal bran and human faecal remains from archaeological deposits - some preliminary observations, pp. 85-104 in B. Proudfoot (ed.) *Site, Environment and Economy*. (Symposium of the Association of Environmental Archaeology 3). Oxford, British Archaeological Reports.

Hall, A. R. 1996. A survey of plaeobotanical evidence for dyeing and mordanting from British archaeological excavations. *Quaternary Science Reviews* 15: 635–40.

Hall, A. R. 2000. A brief history of plant foods in the city of York: What the cesspits tell us, pp. 22–41, in E. White (ed.) *Feeding a City – York: The Provision of Food from Roman Times to the Beginning of the Twentieth Century*. Blackawtry, Devon: Prospect Books.

Hunter, K. 2005. Charred plant remains, pp. 163–173, in V. Birbeck, R. J. C. Smith, P. Andrews and N. Stoodley (eds). *The Origins of Mid-Saxon Southampton: Excavations at the Friends Provident St Mary's Stadium 1998–2000*. Salisbury: Wessex Archaeology.

Kenward, H. K. and Hall, A. R. 1995. Biological evidence from Anglo-Scandinavian deposits at 16-22 Coppergate. (Archaeology of York 14/7). York: Council for British Archaeology.

Mead, W. E. 1967. *The English Medieval Feast*. New York: Barnes & Noble, Inc.

Monk, M. 1980. The seed remains, pp. 128–133, in P. Holdsworth (ed.) *Excavations at Melbourne Street, Southampton, 1971–76*. (Council for British Archaeology Report 33/ Southampton Archaeological Research Committee Report 1). Southampton: Southampton Archaeological Research Committee.

Monk, M. n.d. *The Plant Remains from Saxon Southampton: The Pioneer Phase*. Unpublished manuscript supplied by Gill Campbell, Centre for Archaeology, English Heritage.

Mori, S. A., and G.T. Prance. 1990b. Taxonomy, Ecology, and Economic Botany of the Brazil nut (*Bertholletia excelsa* Humb. and Bonpl.: Lecythidaceae). *Advances in Economic Botany* 8: 130–50.

Pollman, B., Jacomet, S. and Schlumbaum, A. 2005. Morphological and genetic studies of waterlogged *Prunus* species from the Roman vicus Tasgetium (Eschenz, Switzerland). *Journal of Archaeological Science* 32: 1471–80.

Pynson, R. 1500. *A Noble Boke of festes Ryalle and Cokery*. London.

Roach, F. 1985. *Cultivated Fruits of Britain*. Oxford: Blackwell.

Rogers, P. W. 1997. *Textile production at 16-22 Coppergate*. (Archaeology of York 17/11). York: Council for British Archaeology.

Smith, S. and F. Green. 2005. Food, packing and plants on board: the archaeobotanical evidence, pp. 588–602 and 677–95 in J. Gardiner with M. Allen (eds.), *Before the Mast: Life and Death Aboard the Mary Rose*. (The Archaeology of the Mary Rose, Volume 4). Portsmouth: Mary Rose Trust.

Stace, C. 1997. (second edition) *New Flora of the British Isles*. Cambridge: Cambridge University Press.

Stevens, C. 2006. Charred, mineralised and waterlogged plant remains, pp. 104-114, in P. Andrews (ed) *A Mid-Saxon site at Anderson's Road, Southampton*. *Proceedings of the Hampshire Field Club and Archaeological Society* 61: 81–133.

van der Veen, M. 1989. Charred grain assemblages from Roman-period Corn Driers in Britain. *Archaeological Journal* 146: 302–19.

van der Veen, M. ; Livarda, A. and Hill, A. 2007a. The archaeobotany of Roman Britain: Current State and Identification of Research Priorities. *Britannia* 38: 181–210.

van der Veen, M. ; Livarda, A. and Hill, A. 2007b. New plant foods in Roman Britain – Dispersal and social access. *Environmental Archaeology* 13: 11–36.

Wiltshire, P. 1995. The effect of food processing on palatability of wild fruits with a high tannin content, pp. 385-97, in Kroll, H. and Pasternak, R. (eds.) *Res Archaeobotanicae*. (Proceedings of the 9th Symposium of the International Workgroup for Palaeoethnobotany). Kiel: Oetker-Voges-Verlag.

Zohary, D. and Hopf, M. 2000. (third edition) *Domestication of Plants in the Old World: The Origin and Spread of Cultivated Plants in West Asia, Europe, and the Nile Valley*. Oxford: Clarendon Press.

Table 1: Charred and mineralised plant remains from Late Saxon deposits at Southampton French Quarter (ordered by sample and tenement number)

Sample Number	16	2	15	127	126	125
Context Number	503	289	523	5307	5311	5312
Feature Number	48	287	210	5303	5303	5303
Tenement Number	172	172	173	180	180	180
Context Type	pit	pit	pit	pit	pit	pit
Sample Volume (L.)	20	40	40	15	20	40
Flot Volume (ml)	100 ml	50 ml	150 ml	45 ml	50 ml	80 ml
Proportion of flot sorted*	100%	100%	100%	100%	50%	100%
Seeds/ litre (calculated from total of both MPR & CPR)	9.1	2.5	5.1	34.5	24.3	10.6
Latin Binomial						
CHARRED PLANT REMAINS						
Cereal Grain						
<i>Hordeum</i> sp. - hulled twisted grain	-	-	-	-	-	2
<i>Hordeum</i> sp. - hulled	1	12	5	7	-	5
cf. <i>Hordeum</i> sp.	-	-	-	1	-	-
<i>Secale cereale</i> L.	-	-	-	3	9	-
cf. <i>Secale cereale</i> L.	-	-	2	4	11	-
<i>Secale cereale</i> L./ <i>Triticum</i> sp. - indeterminate	-	-	-	11	12	8
<i>Secale cereale</i> L./ POACEAE - large-sized caryopsis	-	-	-	1	10	-
<i>Triticum</i> sp. - possible glume wheat type	-	-	1	-	-	-
<i>Triticum</i> sp. - free-threshing type	8	11	11	53	3	41
<i>Triticum</i> sp. - indeterminate type	1	3	-	-	-	-
Cereal – indeterminate	9 ^E	9 ^E	10	5 ^E	3	13
Cereal/ POACEAE – indeterminate	4 ^E	7 ^E	18 ^E	45 ^E	50 ^E	30 ^E
Embryo/ Coleoptile						
Cereal/ POACEAE - detached coleoptile	1	-	1	-	-	3
Cereal/ POACEAE - detached embryo	-	-	-	2	3	2
Cereal Chaff						
<i>Hordeum</i> sp./ <i>Secale cereale</i> L. - indeterminate rachis node	-	-	-	-	3	-
<i>Secale cereale</i> L. - rachis node	-	-	-	5	20	-
Cereal/ POACEAE - indeterminate rachis node	-	-	-	-	-	2
Cereal/ POACEAE - culm node	-	-	1	-	1	-
Pulses						
<i>Vicia faba</i> L. var. minor	-	-	1	-	-	-
<i>Vicia</i> sp./ <i>Pisum sativum</i> L.	-	-	1 ^E	-	1	-
Fruit/ Nut						
<i>Corylus avellana</i> L. - nutshell (count = estimate whole nut)	11 ^E	1	1	1	1	1
Unidentified - fruit stone/ nut	-	-	-	-	-	1

Table 1: Charred and mineralised plant remains from Late Saxon deposits at Southampton French Quarter continued...

Sample Number	16	2	15	127	126	125
Context Number	503	289	523	5307	5311	5312
Feature Number	48	287	210	5303	5303	5303
Tenement Number	172	172	173	180	180	180
Context Type	pit	pit	pit	pit	pit	pit
CHARRED PLANT REMAINS continued...						
Weed/ Wild						
<i>Ranunculus</i> subg. RANUNCULUS	-	-	-	-	-	1
<i>Ranunculus</i> spp. - internal structure	1	-	1	-	-	-
<i>Chenopodium</i> spp.	16	-	-	-	-	3
CHENOPODIACEAE/ CARYOPHYLLACEAE - indet. Int'l structure	-	-	1	-	-	1
<i>Stellaria media</i> (L.) Vill. - agg.	-	-	-	-	-	1
<i>Cerastium</i> spp.	-	-	1	-	-	-
<i>Agrostemma githago</i> L.	2	-	-	4	-	-
<i>Agrostemma githago</i> L. - calyx	-	-	-	-	2	-
cf. <i>Agrostemma githago</i> - internal structure	-	1	-	-	1	-
<i>Malva</i> spp.	-	-	1	-	-	-
cf. <i>Fallopia convolvulus</i> (L.) Á. Löve	1	-	-	-	-	-
<i>Polygonum</i> sp./ <i>Rumex</i> sp./ <i>Carex</i> sp. - indet. internal structure	6	-	1	-	-	-
<i>Rumex</i> spp.	-	-	3	-	-	-
<i>Raphanus raphanistrum</i> L. - capsule segment	1	-	-	-	1	-
<i>Reseda luteola</i> L.	-	-	-	68	3	25
<i>Vicia</i> cf. <i>cracca</i> L.	-	-	-	2	-	-
<i>Vicia sativa</i> L.	-	-	-	-	1	-
<i>Vicia</i> spp./ <i>Lathyrus</i> spp.	1	-	1	-	2	-
<i>Melilotus</i> spp./ <i>Medicago</i> spp./ <i>Trifolium</i> spp.	1	-	2	-	-	1
<i>Lithospermum arvense</i> L.	-	-	1	-	-	-
<i>Galium verum</i> L/ <i>mollugo</i> L. - type	-	-	-	-	-	1
<i>Galium</i> spp.	1	-	-	-	-	-
<i>Anthemis cotula</i> L.	-	-	1	-	12	-
<i>Chrysanthemum segetum</i> L.	-	-	-	-	3	-
<i>Tripleurospermum inodorum</i> (L.) Sch. Bip.	1	-	-	1	6	-
ASTERACEAE - internal structure small-sized achene	2	-	-	1	-	-
<i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link) Schult.	2	-	6	-	1	-
cf. <i>Bolboschoenus maritimus</i> (L.) Palla/ <i>schoenoplectus</i> spp. - int'l strct.	1	-	-	-	-	-
<i>Carex</i> spp. - 2-sided	1	-	-	-	-	-
<i>Carex</i> spp. - 3-sided	1	-	2	1	-	2
<i>Poa</i> spp. - type caryopsis	-	-	-	-	-	6
<i>Avena</i> spp.	1	1	-	1	-	-
<i>Avena</i> spp. - floret base	-	-	-	-	-	2
<i>Avena</i> spp./ <i>Bromus</i> spp.	4 ^E	21	30	4	12 ^E	-
<i>Bromus</i> spp.	1	1	-	1	2	-
POACEAE - small-sized caryopsis	2	-	-	3	3	4
POACEAE - medium-sized caryopsis	-	-	-	-	-	3
Unidentified	6	3	-	-	5	8
Indeterminate - internal structure/ poorly preserved seed	-	-	-	50 ^E	30	28
Indeterminate - highly vitrified amorphous plant material	95 ^E	28	100 ^E	-	-	32

Table 1: Charred and mineralised plant remains from Late Saxon deposits at Southampton French Quarter continued...

Sample Number	16	2	15	127	126	125
Context Number	503	289	523	5307	5311	5312
Feature Number	48	287	210	5303	5303	5303
Tenement Number	172	172	173	180	180	180
Context Type	pit	pit	pit	pit	pit	pit
MINERALISED PLANT REMAINS (including dried-out waterlogged plant remains)						
Fruit/ Nut						
<i>Ficus carica</i> L. - internal structure	-	-	-	-	1	-
<i>Corylus avellana</i> L. - nutshell (count = estimate whole nut)	-	-	-	1	-	-
<i>Sambucus nigra</i> L.	-	1	-	20	27	14
Weed/ Wild						
<i>Ranunculus</i> subgenus RANUNCULUS - internal structure	-	-	-	1	-	-
<i>Urtica dioica</i> L.	-	-	-	190	-	179
<i>Mentha</i> spp.	-	-	-	-	-	-
APIACEAE - <i>Salvia</i> spp. type	-	-	-	6	1	-
<i>Juncus</i> spp.	-	-	-	1	-	-
Unidentified	-	-	-	24	1	3
Indeterminate - amorphous plant remains	-	-	-	-	2	3
Fungal body (excluded from total count)	-	-	-	(4)	(3)	-
Total Identifications Charred Plant Remains	182	98	203	274	211	226
Total Identifications Mineralised Plant Remains	0	1	0	243	32	199
TOTAL	182	99	203	517	243	425

*all results are only for that portion of the flot which was sorted

N^E = estimated count.

N⁺ = items from heavy residue included in count.

Key: + = < 5 items, ++ = 5 - 25 items, +++ = 25 - 50 items, ++++ = 50 - 100 items

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits at Southampton French Quarter (ordered by tenement and sample number)

Sample Number	176	179	35	154	4	106	72
Context Number	7576	7579	777	6829	258	1331	5091
Feature Number	7572	7572	384	6832	210	1317	5090
Tenement Number	167	167	172	172	173	174	179
Context Type	cesspit	cesspit	well	rubbish pit	pit	pit	pit
Phase	AN	AN	AN	AN	AN	AN	AN
Sample Volume (L.)	40	40	20	40	40	40	40
Flot Volume (ml)	320 ml	320 ml	150 ml	1500 ml	100 ml	130 ml	50 ml
Proportion of flot sorted*	100%	100%	100%	12.50%	100%	100%	100%
Seeds/ litre (calculated on total CPR & MPR)	9.2	16.8	4.6	2.0	3.1	8.1	6.2
Latin Binomial							
CHARRED PLANT REMAINS							
Cereal Grain							
<i>Avena</i> cf. <i>sativa</i> L. - germinated	-	-	-	-	-	-	-
<i>Avena</i> spp./ <i>Secale cereale</i> L. - indeterminate	-	-	-	-	-	-	-
<i>Hordeum</i> sp. - hulled	3	3	3	-	-	13 ^E	1
<i>Hordeum</i> sp.	-	-	-	-	-	-	-
cf. <i>Hordeum</i> sp. - germinated	-	-	-	-	-	-	-
cf. <i>Hordeum</i> sp.	-	-	-	-	-	-	-
<i>Secale cereale</i> L.	2	3	-	-	-	-	-
cf. <i>Secale cereale</i> L.	1	-	-	-	-	-	-
<i>Secale cereale</i> L./ <i>Triticum</i> sp.	-	3	-	-	-	-	4
<i>Triticum</i> cf. <i>spelta</i> L.	-	-	5	-	-	-	-
<i>Triticum</i> sp. - free-threshing type	1	-	-	-	-	-	6
<i>Triticum</i> sp. - indeterminate	-	-	10	-	3	63 ^E	-
<i>Triticum</i> sp. - germinated	-	-	4	-	-	-	-
Cereal - indeterminate	5	4	24	-	3 ^E	57	-
Cereal/ POACEAE - indeterminate	10 ^E	10	10 ^E	3 ^E	-	5 ^E	6 ^E
Embryo/ Coleoptile							
Cereal/ POACEAE - detached coleoptile	-	-	-	-	-	-	-
Cereal/ POACEAE - detached embryo	1	-	-	-	-	2	-
cf. Cereal/ POACEAE - detached embryo	-	-	-	-	-	6	-
Cereal Chaff							
<i>Avena sativa</i> L. - floret base	-	-	-	-	-	-	-
<i>Avena</i> cf. <i>sativa</i> L. - floret base	-	-	-	1	-	-	-
cf. <i>Hordeum</i> sp. - rachis node	-	-	-	-	-	1	-
<i>Hordeum</i> sp./ <i>Secale cereale</i> L. - indeterminate rachis node	-	-	-	-	-	-	-
<i>Secale cereale</i> L. - rachis node	2	1	-	1	-	5	1
<i>Triticum aestivum</i> L./ <i>compactum</i> Host. - type rachis node	-	-	-	-	-	-	-
<i>Triticum</i> sp. - indet. free-threshing rachis node	-	-	-	-	-	-	-
<i>Triticum</i> sp. - rachis node	-	-	-	-	-	1	-
Cereal - indeterminate rachis node	-	-	-	-	-	-	1
Cereal - indeterminate rachis internode	-	-	-	-	-	-	-
Cereal/ POACEAE - indet. basal rachis node	-	-	-	1	-	-	-
Cereal/ POACEAE - culm node	6*	6	-	47	-	2	1
Cereal/ POACEAE - culm base	-	1	-	1	-	1	-
cf. Cereal/ POACEAE - culm base	-	-	-	1	-	-	-

* = estimated count – also includes heavy residue scores multiplied/ divided by the appropriate factor to match proportion of flot sorted.

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	176	179	35	154	4	106	72
Context Number	7576	7579	777	6829	258	1331	5091
Feature Number	7572	7572	384	6832	210	1317	5090
Tenement Number	167	167	172	172	173	174	179
Context Type	cesspit	cesspit	well	rubbish pit	pit	pit	pit
CHARRED PLANT REMAINS continued...							
Pulses							
<i>Vicia faba</i> L. var minor	-	3 ^E	-	-	-	-	-
<i>Vicia</i> cf. <i>faba</i> L. var. minor	-	-	1	-	-	-	-
cf. <i>Vicia</i> cf. <i>faba</i> L. var. minor	-	-	-	-	-	1	-
<i>Vicia</i> spp./ <i>Pisum sativum</i> L.	1	2 ^E	-	-	-	-	-
<i>Pisum sativum</i> L.	-	2 ^E	-	-	-	-	-
<i>Pisum sativum</i> L. - detached hilum	-	-	-	-	-	-	-
Fruit/ Nut							
<i>Corylus avellana</i> L. - nutshell (estimate whole nut)	1	1	1	3	1	2 [†]	1
<i>Rubus</i> section <i>Rubus</i>	-	-	-	-	-	1	-
<i>Fragaria vesca</i> L.	-	-	-	-	-	-	-
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens	-	-	-	-	-	-	-
<i>Prunus cerasus</i> L.	-	1	-	-	-	-	-
cf. <i>Prunus avium</i> (L.) L./ <i>cerasus</i> L. - stone fragment	-	1	-	-	-	-	-
<i>Vitis vinifera</i> L. - immature	-	-	-	-	-	-	-
<i>Sambucus nigra</i> L.	-	2	-	-	-	3	-
cf. <i>Sambucus nigra</i> L.	-	-	-	-	-	-	-
Unidentified nutshell/ fruit stone	-	-	-	-	1	-	-
Other Economic Plants							
<i>Papaver</i> cf. <i>somniferum</i> L.	-	-	-	-	-	-	-
? <i>Petroselinum crispum</i> (Mill.) Nyman ex A. W. Hill	-	-	-	-	-	-	-
Unidentified - fruit stone/ nut shell (fragments)	-	2	-	-	-	-	-
Weed/ Wild							
<i>Pteridium aquilinum</i> (L.) Kuhn - leaf	-	-	-	-	-	-	-
<i>Ranunculus acris</i> L./ <i>repens</i> L./ <i>bulbosus</i> L.	-	1	-	3	-	-	-
<i>Ranunculus</i> subg. RANUNCULUS	-	-	-	-	-	-	-
<i>Ranunculus</i> spp. - internal structure	-	-	-	-	-	-	-
cf. <i>Ranunculus</i> subg. RANUNCULUS	-	-	-	-	-	-	-
<i>Papaver rhoeas</i> L./ <i>dubium</i> L.	-	1	-	-	-	-	-
<i>Papaver</i> spp./ <i>Glaucium flavum</i> Crantz	-	-	-	-	-	-	-
<i>Urtica dioica</i> L.	1	-	-	-	-	-	1
<i>Chenopodium</i> spp. (clearly charred)	-	-	-	34	-	1	50 ^E
<i>Chenopodium</i> spp. (? ancient)	-	-	6	-	-	-	-
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - internal structure	-	-	-	-	-	2	-
<i>Atriplex</i> spp.	-	1	-	1	-	-	-
<i>Atriplex</i> spp. (? ancient)	-	-	1	-	-	-	-
CHENOPODIACEAE/ CARYOPHYLLACEAE - indeterminate	-	-	-	-	-	-	-
<i>Stellaria media</i> L. - agg.	-	-	-	-	-	-	-

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	176	179	35	154	4	106	72
Context Number	7576	7579	777	6829	258	1331	5091
Feature Number	7572	7572	384	6832	210	1317	5090
Tenement Number	167	167	172	172	173	174	179
Context Type	cesspit	cesspit	well	rubbish pit	pit	pit	pit
CHARRED PLANT REMAINS continued...							
Weed/ Wild Plants continued...							
<i>Cerastium</i> spp.	-	-	-	2	-	-	-
cf. <i>Spergula arvensis</i> L.	-	-	-	-	-	-	-
<i>Agrostemma githago</i> L.	-	-	-	-	-	-	-
<i>Agrostemma githago</i> L. - internal structure	-	-	-	-	-	-	-
cf. <i>Agrostemma githago</i> L.	-	-	-	-	-	-	-
cf. <i>Agrostemma githago</i> L. - calyx	-	-	-	1	-	-	-
cf. <i>Agrostemma githago</i> L. - internal structure	1	-	-	-	-	-	-
<i>Silene</i> spp.	-	1	-	-	-	-	-
cf. <i>Silene</i> spp.	-	-	-	1	-	-	-
CARYOPHYLLACEAE - indeterminate internal structure	1	-	-	-	1	-	-
<i>Malva</i> spp.	-	-	-	-	-	-	-
<i>Malva</i> spp. - seed head, with seeds (seed counted)	-	-	-	-	-	-	-
MALVACEAE - unident (? <i>Alcea rosea</i> L.)	-	-	-	-	-	-	-
<i>Persicaria</i> spp.	-	-	-	2	-	-	1
<i>Polygonum aviculare</i> L.	-	-	-	10	-	-	-
<i>Polygonum</i> cf. <i>aviculare</i> L.	-	1	-	-	-	-	-
<i>Polygonum</i> spp.	-	-	-	13	-	-	-
<i>Polygonum</i> spp. - immature	-	-	-	-	-	-	-
<i>Fallopia convolvulus</i> (L.) Á. Löve	-	-	-	4	-	-	-
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - indet. internal structure	2	1	-	23 ^E	-	-	1
<i>Rumex</i> spp.	-	4	-	-	1	-	1
<i>Rumex</i> spp. - detached turbucle	-	-	-	-	-	-	-
<i>Brassica</i> spp./ <i>Sinapis</i> spp.	15 ^E	15	-	-	-	-	1
cf. <i>Brassica</i> sp. - small-sized	-	-	-	-	-	-	1
<i>Raphanus raphanistrum</i> L. - capsule segment	-	1	-	1	-	-	-
cf. <i>Raphanus raphanistrum</i> L.	-	-	-	-	-	-	-
cf. <i>Raphanus raphanistrum</i> L. - capsule segment	-	-	1	-	-	-	-
BRASSICACEAE - fragment of base of siliqua (? <i>Sinapis arvensis</i> L.)	1	-	-	1	-	-	-
<i>Primula</i> spp.	-	-	2	-	-	-	-
<i>Anagallis arvensis</i> L.	-	-	-	12	-	-	-
cf. PRIMULACEAE - unident	-	-	-	2	-	-	-
<i>Vicia</i> cf. <i>hirsuta</i> (L.) Gray	-	-	-	-	1	-	-
<i>Vicia</i> spp./ <i>Lathyrus</i> spp.	2	5	2	-	-	2 ^E	-
<i>Melilotus</i> spp./ <i>Medicago</i> spp./ <i>Trifolium</i> spp.	2	1	-	2	1	-	13
FABACEAE - immature, possibly a pulse	-	-	-	-	-	-	-
cf. FABACEAE - seed pod fragment	-	-	-	1	-	-	-
cf. FABACEAE - hilum fragment	-	-	-	-	-	-	-
<i>Scandix pecten-veneris</i> L.	-	-	-	-	-	1	-
APIACEAE - unidentified	-	1	-	-	-	-	-
<i>Prunella vulgaris</i> L.	-	-	-	1	-	-	-
<i>Lycopus europaeus</i> L.	-	-	-	1	-	-	-
<i>Plantago major</i> L.	-	-	-	-	-	-	2
<i>Plantago media</i> L./ <i>lanceolata</i> L.	1	-	-	-	-	-	-

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	176	179	35	154	4	106	72
Context Number	7576	7579	777	6829	258	1331	5091
Feature Number	7572	7572	384	6832	210	1317	5090
Tenement Number	167	167	172	172	173	174	179
Context Type	cesspit	cesspit	well	rubbish pit	pit	pit	pit
CHARRED PLANT REMAINS continued...							
Weed/ Wild Plants continued...							
cf. <i>Plantago media</i> L./ <i>lanceolata</i> L.	-	1	-	-	-	-	-
<i>Euphrasia</i> spp./ <i>Odontites vernus</i> (Bellardi) Dumort	1	-	-	-	-	-	-
<i>Sherardia arvensis</i> L.	-	1	-	-	-	-	-
cf. <i>Galium verum</i> L./ <i>mollugo</i> L. - type	-	-	-	1	-	-	-
<i>Galium aparine</i> L.	-	-	-	-	-	-	-
<i>Galium</i> spp.	-	1	-	-	-	2	-
<i>Valerianella dentata</i> (L.) Pollich	-	-	-	-	-	-	-
<i>Centaurea</i> spp.	2	-	-	-	-	-	-
cf. <i>Centaurea</i> spp.	-	1	-	-	-	-	-
<i>Lapsana communis</i> L.	-	-	-	-	-	1	1
cf. <i>Lapsana communis</i> L.	-	-	-	-	-	-	-
<i>Picris echioides</i> L.	-	-	-	-	-	-	-
<i>Anthemis cotula</i> L.	10	2	-	152	-	9	3
cf. <i>Anthemis cotula</i> L.	-	-	-	8	-	-	-
cf. <i>Anthemis cotula</i> L. - flower head with seed (seed quantified)	-	-	-	5	-	-	-
<i>Anthemis</i> spp./ <i>Chrysanthemum</i> sp. - indeterminate	-	-	-	-	-	-	-
<i>Chrysanthemum segetum</i> L.	2	2	-	7	-	8 ^E	-
<i>Tripleurospermum inodorum</i> (L.) Sch. Bip.	-	-	-	17	-	1	2
ASTERACEAE - internal structure small-sized achene	1	2	-	71	-	4	-
ASTERACEAE - indet.	-	-	-	-	-	-	1
cf. <i>Potamogeton</i> spp.	-	-	-	1	-	-	-
<i>Juncus</i> spp.	-	-	-	1	-	-	-
<i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link) Schult.	2	-	-	4	-	-	-
cf. <i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link) Schult.	-	-	-	-	-	-	-
<i>Isolepis setacea</i> (L.) R. Br.	-	-	-	1	-	-	-
<i>Carex</i> spp. - 2-sided	-	-	-	6	-	1	1
<i>Carex</i> spp. - 3-sided	-	-	-	10	-	3	1
CYPERACEAE - indeterminate, oval-shaped	-	-	-	-	-	1	-
CYPERACEAE - indeterminate, long, bevel-shaped (?Cyperus)	-	-	-	-	-	-	-
CYPERACEAE - indeterminate, seed coat fragment	-	-	-	1	-	-	-
cf. CYPERACEAE - unidentified	-	-	-	3	-	-	-
<i>Lolium</i> sp.	-	-	-	-	-	1	-
cf. <i>Lolium</i> sp. - floret for containing grain	-	-	-	-	-	1	-
<i>Avena</i> spp.	-	-	-	-	-	-	1
<i>Avena</i> spp. - germinated caryopsis	-	-	-	-	-	-	-
<i>Avena</i> spp. - awn fragments (unquantified)	-	-	-	+	-	+	+
<i>Avena</i> spp. - floret base	-	1	-	-	-	-	2
<i>Avena</i> spp. - glume (unquantified)	-	+	-	-	-	-	-
<i>Avena</i> spp. - rachilla	1	-	-	1	-	-	-
cf. <i>Avena</i> spp.	-	1	-	-	-	-	-
cf. <i>Avena</i> spp. - germinated	-	-	-	-	-	-	-
<i>Avena</i> spp./ <i>Bromus</i> spp.	31 ^E	49 ^E	10	6 ^E	46 ^E	85 ^E	11 ^E
<i>Avena</i> spp./ <i>Bromus</i> spp. - germinated	-	-	-	-	-	3 ^E	-

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	176	179	35	154	4	106	72
Context Number	7576	7579	777	6829	258	1331	5091
Feature Number	7572	7572	384	6832	210	1317	5090
Tenement Number	167	167	172	172	173	174	179
Context Type	cesspit	cesspit	well	rubbish pit	pit	pit	pit
CHARRED PLANT REMAINS continued...							
Weed/ Wild Plants continued...							
<i>Bromus</i> spp.	-	6	-	2	-	2	2
cf. <i>Bromus</i> spp.	1	-	-	-	-	-	-
POACEAE - indet. small-sized caryopsis	5	3	1	11	-	-	7
cf. POACEAE - indet. small-sized caryopsis	-	-	-	-	-	-	-
POACEAE - indet. medium-sized caryopsis	-	-	-	-	-	-	2
POACEAE - indet. large-sized caryopsis	3	-	-	2	13	-	-
POACEAE - culm node	3	3	-	22	-	-	-
POACEAE - culm base	-	-	-	1	-	-	-
Unidentified	50	4	10	33	-	24	35 ^E
Unidentified - bud	-	-	-	1	-	-	-
Unidentified - calyx/ leaf	-	-	-	19	-	-	-
Unidentified - culm base/ tuber (fragments)	-	-	-	2	-	-	-
Unidentified - flower	-	-	-	1	-	-	-
Unidentified - seed pod	1	-	-	-	-	-	-
Unidentified - stalk	-	-	-	-	-	-	-
Indeterminate - poorly preserved seed/ internal structures	26	40	-	62	-	-	-
Indeterminate - highly vitrified amorphous plant material	-	30	-	-	51	7	50 ^E
MINERALISED PLANT REMAINS							
Cereal Chaff							
Cereal/ POACEAE - indeterminate straw fragments	-	-	-	-	-	-	-
Fruit							
<i>Ficus carica</i> L.	-	-	-	-	-	-	13
<i>Rubus</i> section <i>Rubus</i>	-	-	-	-	-	-	19
<i>Rubus</i> section <i>Rubus</i> (part charred)	-	-	-	-	-	-	-
<i>Pyrus</i> sp./ <i>Malus</i> sp. - indeterminate	-	-	-	-	-	-	-
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel	39 ^E	-	-	-	-	-	-
<i>Sambucus nigra</i> L.	62	441	-	-	-	-	2
<i>Sambucus nigra</i> L. (part charred)	-	-	-	-	-	-	-
Weed/ Wild							
<i>Papaver rhoeas</i> L.	-	-	-	-	-	-	-
<i>Papaver rhoeas</i> L./ <i>dubium</i> L.	-	-	-	-	-	-	-
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - internal structure	-	-	-	-	-	-	-
BRASSICACEAE - fragment of base of siliqua (? <i>Sinapis arvensis</i> L.)	2	-	-	-	-	-	-
cf. FABACEAE - seed coat	-	1	-	-	-	-	-
<i>Lithospermum arvense</i> L.	-	-	-	-	-	-	-
<i>Mentha</i> spp.	-	-	-	-	-	-	-
<i>Galium</i> sp. - small-sized	-	1	-	-	-	-	-
APIACEAE - <i>Salvia</i> spp. type	-	-	-	-	-	-	-
<i>Carduus</i> spp./ <i>Cirsium</i> spp.	-	-	-	-	-	-	-
<i>Chrysanthemum segetum</i> L.	-	-	-	-	-	-	-

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	176	179	35	154	4	106	72
Context Number	7576	7579	777	6829	258	1331	5091
Feature Number	7572	7572	384	6832	210	1317	5090
Tenement Number	167	167	172	172	173	174	179
Context Type	cesspit	cesspit	well	rubbish pit	pit	pit	pit
MINERALISED PLANT REMAINS continued...							
Weed/ Wild Plants continued...							
ASTERACEAE - internal structure, small-sized achene	1	1	-	-	-	-	-
<i>Carex</i> spp. - 2-sided	-	-	-	-	-	-	-
<i>Carex</i> spp. - 3-sided	-	-	-	-	-	-	-
<i>Carex</i> spp. - indet. Internal structure	-	-	-	-	-	-	-
CYPERACEAE - indeterminate	-	-	-	-	-	1	-
POACEAE - small-sized caryopsis	-	-	-	-	-	1	-
Unidentified	3	2	-	-	-	-	3
Indeterminate seed coat - ?fruit (e.g. plum/ cherry/ fig)	-	-	-	-	-	-	-
Indeterminate - poorly preserved seed/ internal structure	12*	-	-	-	-	-	-
Indeterminate amorphous mineralised concretions	+++	-	-	-	-	-	-
OTHER REMAINS							
Fungal bodies - unidentified	-	-	-	-	6	7	-
Insect - indet (charred)	-	-	-	1	-	-	-
						‡incl. 10- 4mm HR result	
Total Charred Plant Remains	198	225	91	624	122	322	211
Total Mineralised Plant Remains	169	446	0	0	0	2	37
TOTAL Charred and Mineralised Plant Remains	367	671	91	624	122	324	248

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	69	70	55	134	138	141	198
Context Number	5092	5162	3310	4309	4326	4438	8248
Feature Number	5090	5160	3305		4325	3115	8249
Tenement Number	179	180	237	237	237	237	242
Context Type	pit	pit	pit	burnt wood	pit	pit	post hole
Phase	AN	AN	AN	AN	AN	AN	AN
Sample Volume (L.)	40	10	10	10	40	20	20
Flot Volume (ml)	50 ml	150 ml	500 ml	25 ml	80 ml	120 ml	2000 ml
Proportion of flot sorted*	100%	100%	100%	100%	50%	100%	3.13%
Seeds/ litre (calculated on total CPR & MPR)	24.7	17.9	241.5	4.7	17.2	15.9	2234.8
Latin Binomial							
CHARRED PLANT REMAINS							
Cereal Grain							
<i>Avena</i> cf. <i>sativa</i> L. - germinated	-	-	-	-	-	-	1
<i>Avena</i> spp./ <i>Secale cereale</i> L. - indeterminate	-	-	-	-	-	1	-
<i>Hordeum</i> sp. - hulled	-	6	5	20	2	-	-
<i>Hordeum</i> sp.	4	-	-	-	-	-	-
cf. <i>Hordeum</i> sp. - germinated	1	-	-	-	-	-	-
cf. <i>Hordeum</i> sp.	-	-	1	2	-	-	-
<i>Secale cereale</i> L.	-	5	-	-	-	-	-
cf. <i>Secale cereale</i> L.	-	-	-	-	-	-	-
<i>Secale cereale</i> L./ <i>Triticum</i> sp.	-	14	-	2	-	-	-
<i>Triticum</i> cf. <i>spelta</i> L.	-	-	-	-	-	-	-
<i>Triticum</i> sp. - free-threshing type	-	9	-	1	-	4	-
<i>Triticum</i> sp. - indeterminate	5	-	5	-	4	-	-
<i>Triticum</i> sp. - germinated	-	-	-	-	-	-	-
Cereal - indeterminate	7	5	6	-	3 ^E	-	10
Cereal/ POACEAE - indeterminate	8 ^E	45	16 ^E	-	8	70 ^E	3 ^E
Embryo/ Coleoptile							
Cereal/ POACEAE - detached coleoptile	1	3	1 ^E	-	21	8	173
Cereal/ POACEAE - detached embryo	1	2	-	-	-	-	-
cf. Cereal/ POACEAE - detached embryo	-	-	-	-	-	-	-
Cereal Chaff							
<i>Avena sativa</i> L. - floret base	-	-	-	-	14	-	-
<i>Avena</i> cf. <i>sativa</i> L. - floret base	-	-	-	-	-	-	16
cf. <i>Hordeum</i> sp. - rachis node	-	-	-	-	-	-	-
<i>Hordeum</i> sp./ <i>Secale cereale</i> L. - indeterminate rachis node	1	-	-	-	-	-	-
<i>Secale cereale</i> L. - rachis node	1	-	-	-	-	-	1
<i>Triticum aestivum</i> L./ <i>compactum</i> Host. - type rachis node	-	-	4	-	-	-	-
<i>Triticum</i> sp. - indet. free-threshing rachis node	-	-	6	-	-	-	-
<i>Triticum</i> sp. - rachis node	1	-	-	-	-	-	-
Cereal - indeterminate rachis node	4	-	6	-	-	1	-
Cereal - indeterminate rachis internode	-	-	1	-	-	-	-
Cereal/ POACEAE - indet. basal rachis node	-	-	-	-	-	-	-
Cereal/ POACEAE - culm node	-	1	37	-	2	-	2
Cereal/ POACEAE - culm base	-	-	-	-	-	-	-
cf. Cereal/ POACEAE - culm base	-	-	-	-	-	-	-

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	69	70	55	134	138	141	198
Context Number	5092	5162	3310	4309	4326	4438	8248
Feature Number	5090	5160	3305		4325	3115	8249
Tenement Number	179	180	237	237	237	237	242
Context Type	pit	pit	pit	burnt wood	pit	pit	post hole
CHARRED PLANT REMAINS continued...							
Pulses							
<i>Vicia faba</i> L. var. minor	-	-	-	-	-	-	-
<i>Vicia</i> cf. <i>faba</i> L. var. minor	-	-	-	-	-	-	-
cf. <i>Vicia</i> cf. <i>faba</i> L. var. minor	-	-	-	-	-	-	-
<i>Vicia</i> spp./ <i>Pisum sativum</i> L.	-	-	62	-	-	1	-
<i>Pisum sativum</i> L.	-	-	18	-	-	-	-
<i>Pisum sativum</i> L. - detached hilum	-	-	1	-	-	-	-
Fruit/ Nut							
<i>Corylus avellana</i> L. - nutshell (estimate whole nut)	1	1	1	2	1	2 [†]	1
<i>Rubus</i> section <i>Rubus</i>	-	-	-	-	-	-	-
<i>Fragaria vesca</i> L.	-	-	-	-	-	-	-
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens	-	-	1	1	-	-	-
<i>Prunus cerasus</i> L.	-	-	-	-	-	-	-
cf. <i>Prunus avium</i> (L.) L./ <i>cerasus</i> L. - stone fragment	-	-	-	-	-	-	-
<i>Vitis vinifera</i> L. - immature	-	-	-	-	1	-	-
<i>Sambucus nigra</i> L.	-	-	-	-	-	-	-
cf. <i>Sambucus nigra</i> L.	-	-	-	-	-	-	-
Unidentified nutshell/ fruit stone	-	-	-	-	-	-	-
Other Economic Plants							
<i>Papaver</i> cf. <i>somniferum</i> L.	-	-	-	-	-	-	-
? <i>Petroselinum crispum</i> (Mill.) Nyman ex A. W. Hill	-	-	1	-	-	-	-
Unidentified - fruit stone/ nut shell (fragments)	-	-	-	-	-	-	-
Weed/ Wild							
<i>Pteridium aquilinum</i> (L.) Kuhn - leaf	-	-	1	-	-	-	-
<i>Ranunculus acris</i> L./ <i>repens</i> L./ <i>bulbosus</i> L.	-	-	-	-	-	-	-
<i>Ranunculus</i> subg. RANUNCULUS	4	-	-	-	-	-	-
<i>Ranunculus</i> spp. - internal structure	-	-	-	-	-	-	-
cf. <i>Ranunculus</i> subg. RANUNCULUS	7	-	-	-	-	-	-
<i>Papaver rhoeas</i> L./ <i>dubium</i> L.	-	-	-	-	-	-	-
<i>Papaver</i> spp./ <i>Glaucium flavum</i> Crantz	-	-	-	-	-	-	-
<i>Urtica dioica</i> L.	-	-	-	-	-	-	-
<i>Chenopodium</i> spp. (clearly charred)	453	6	-	-	1	-	1 ^E
<i>Chenopodium</i> spp. (? ancient)	-	-	1	-	-	-	-
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - internal structure	-	-	-	4	-	-	-
<i>Atriplex</i> spp.	-	-	-	-	1	-	-
<i>Atriplex</i> spp. (? ancient)	-	-	-	-	-	-	-
CHENOPODIACEAE/ CARYOPHYLLACEAE - indeterminate	-	2	-	-	-	3	-
<i>Stellaria media</i> L. - agg.	-	1	-	-	-	-	-
<i>Cerastium</i> spp.	-	-	-	-	-	-	-
cf. <i>Spergula arvensis</i> L.	-	-	-	-	-	-	-
<i>Agrostemma githago</i> L.	-	-	-	-	-	1	1
<i>Agrostemma githago</i> L. - internal structure	-	-	-	-	-	-	-

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	69	70	55	134	138	141	198
Context Number	5092	5162	3310	4309	4326	4438	8248
Feature Number	5090	5160	3305		4325	3115	8249
Tenement Number	179	180	237	237	237	237	242
Context Type	pit	pit	pit	burnt wood	pit	pit	post hole
CHARRED PLANT REMAINS continued...							
Weed/ Wild Plants continued...							
cf. <i>Agrostemma githago</i> L.	1	-	-	-	-	-	-
cf. <i>Agrostemma githago</i> L. - calyx	2	-	-	-	-	-	1
cf. <i>Agrostemma githago</i> L. - internal structure	-	-	-	-	-	-	-
<i>Silene</i> spp.	-	-	-	-	-	2	1
cf. <i>Silene</i> spp.	-	-	-	-	-	-	-
CARYOPHYLLACEAE - indeterminate internal structure	-	-	-	-	-	-	-
<i>Malva</i> spp.	-	-	-	-	-	-	-
<i>Malva</i> spp. - seed head, with seeds (seed counted)	-	-	-	-	-	-	-
MALVACEAE - unident (? <i>Alcea rosea</i> L.)	-	-	-	-	-	-	-
<i>Persicaria</i> spp.	-	3	-	-	-	1	-
<i>Polygonum aviculare</i> L.	-	-	-	-	-	-	-
<i>Polygonum</i> cf. <i>aviculare</i> L.	-	-	-	-	-	-	-
<i>Polygonum</i> spp.	5	1	-	-	-	-	-
<i>Polygonum</i> spp. - immature	-	1	-	-	-	-	-
<i>Fallopia convolvulus</i> (L.) Á. Löve	-	-	1	-	-	-	-
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - indet. internal structure	10	-	3	-	-	1	-
<i>Rumex</i> spp.	-	-	6	-	1	-	-
<i>Rumex</i> spp. - detached turbucle	-	-	-	-	-	-	-
<i>Brassica</i> spp./ <i>Sinapis</i> spp.	-	-	-	-	-	-	-
cf. <i>Brassica</i> sp. - small-sized	-	-	-	-	-	-	-
<i>Raphanus raphanistrum</i> L. - capsule segment	2	-	1	-	2	2	1
cf. <i>Raphanus raphanistrum</i> L.	1	-	-	-	1	-	-
cf. <i>Raphanus raphanistrum</i> L. - capsule segment	-	1	-	-	-	-	-
BRASSICACEAE - fragment of base of siliqua (? <i>Sinapis arvensis</i> L.)	-	-	-	-	-	-	-
<i>Primula</i> spp.	-	-	-	-	-	-	-
<i>Anagallis arvensis</i> L.	-	-	-	-	-	-	-
cf. PRIMULACEAE - unident	-	-	-	-	-	-	-
<i>Vicia</i> cf. <i>hirsuta</i> L.	-	-	-	-	-	-	-
<i>Vicia</i> spp./ <i>Lathyrus</i> spp.	-	5	23	-	2	4 ^E	2
<i>Melilotus</i> spp./ <i>Medicago</i> spp./ <i>Trifolium</i> spp.	22	-	-	-	-	1	11
FABACEAE - immature, possibly a pulse	-	-	3	-	-	-	-
cf. FABACEAE - seed pod fragment	-	-	-	-	-	-	-
cf. FABACEAE - hilum fragment	-	-	-	-	-	-	-
<i>Scandix pecten-veneris</i> L.	-	-	1	-	-	-	1
APIACEAE - unidentified	-	-	-	-	4	1	-
<i>Prunella vulgaris</i> L.	3	-	-	-	-	1	-
<i>Lycopus europaeus</i> L.	-	-	-	-	-	-	-
<i>Plantago major</i> L.	-	-	-	-	-	-	-
<i>Plantago media</i> L./ <i>lanceolata</i> L.	-	-	-	-	-	-	-
cf. <i>Plantago media</i> L./ <i>lanceolata</i> L.	-	-	-	-	-	-	-
<i>Euphrasia</i> spp./ <i>Odontites vernus</i> (Bellardi) Dumort	1	-	-	-	-	-	-
<i>Sherardia arvensis</i> L.	1	-	1	-	-	-	-
cf. <i>Galium verum</i> L./ <i>mollugo</i> L. - type	-	-	-	-	-	-	-
<i>Galium aparine</i> L.	-	-	2	-	-	-	-

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	69	70	55	134	138	141	198
Context Number	5092	5162	3310	4309	4326	4438	8248
Feature Number	5090	5160	3305		4325	3115	8249
Tenement Number	179	180	237	237	237	237	242
Context Type	pit	pit	pit	burnt wood	pit	pit	post hole
CHARRED PLANT REMAINS continued...							
Weed/ Wild Plants continued...							
<i>Galium</i> spp.	-	-	-	-	-	-	-
<i>Valerianella dentata</i> (L.) Pollich	1	-	-	-	-	-	-
<i>Centaurea</i> spp.	-	-	-	-	-	1	-
cf. <i>Centaurea</i> spp.	-	-	-	-	-	-	-
<i>Lapsana communis</i> L.	-	-	1	-	-	-	-
cf. <i>Lapsana communis</i> L.	1	-	-	-	-	-	-
<i>Picris echioides</i> L.	-	-	-	-	-	-	1
<i>Anthemis cotula</i> L.	30	-	9	-	2	7	13
cf. <i>Anthemis cotula</i> L.	-	-	-	-	-	-	-
cf. <i>Anthemis cotula</i> L. - flower head with seed (seed quantified)	-	-	-	-	-	-	-
<i>Anthemis</i> spp./ <i>Chrysanthemum</i> sp. - indeterminate	-	-	-	-	4	-	-
<i>Chrysanthemum segetum</i> L.	-	1	-	-	27	7 ^E	7
<i>Tripleurospermum inodorum</i> (L.) Sch. Bip.	10	-	-	-	2	1	-
ASTERACEAE - internal structure small-sized achene	9	1	-	1	-	1	4
ASTERACEAE - indet.	-	-	-	-	-	-	-
cf. <i>Potamogeton</i> spp.	-	-	-	-	-	-	-
<i>Juncus</i> spp.	-	-	-	-	-	-	-
<i>Eleocharis palustris</i> (L.) Roem. & Schult./ uniglumis (Link) Schult.	1	-	2	-	1	1	-
cf. <i>Eleocharis palustris</i> (L.) Roem. & Schult./ uniglumis (Link) Schult.	1	-	-	1	-	-	-
<i>Isolepis setacea</i> (L.) R. Br.	-	-	-	-	-	-	-
<i>Carex</i> spp. - 2-sided	-	-	-	-	-	-	1
<i>Carex</i> spp. - 3-sided	10	-	2	-	-	-	-
CYPERACEAE - indeterminate, oval-shaped	1	-	-	-	-	-	-
CYPERACEAE - indeterminate, long, bevel-shaped (?Cyperus)	1	-	-	-	-	-	-
CYPERACEAE - indeterminate, seed coat fragment	-	-	-	-	-	-	-
cf. CYPERACEAE - unidentified	-	-	-	-	-	-	-
<i>Lolium</i> sp.	-	-	-	-	-	-	-
cf. <i>Lolium</i> sp. - floret for containing grain	-	-	-	-	-	-	-
<i>Avena</i> spp.	-	-	1	-	-	4	427
<i>Avena</i> spp. - germinated caryopsis	-	-	-	-	-	-	5
<i>Avena</i> spp. - awn fragments (unquantified)	+	-	-	-	+	-	+
<i>Avena</i> spp. - floret base	-	-	-	-	-	-	-
<i>Avena</i> spp. - glume (unquantified)	-	-	-	-	-	-	-
<i>Avena</i> spp. - rachilla	-	-	-	-	-	-	-
cf. <i>Avena</i> spp.	-	-	11	-	189	-	-
cf. <i>Avena</i> spp. - germinated	-	-	-	-	5	1	4
<i>Avena</i> spp./ <i>Bromus</i> spp.	29 ^E	17 ^E	35	1 ^E	-	-	-
<i>Avena</i> spp./ <i>Bromus</i> spp. - germinated	-	-	-	-	-	-	-
<i>Bromus</i> spp.	3	-	-	-	-	-	23
cf. <i>Bromus</i> spp.	-	-	-	-	-	-	-
POACEAE - indet. small-sized caryopsis	74	-	5	-	2	5	-
cf. POACEAE - indet. small-sized caryopsis	-	-	-	1	-	-	-
POACEAE - indet. medium-sized caryopsis	19	-	-	-	3	1	10
POACEAE - indet. large-sized caryopsis	5	-	-	2	13	-	150

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	69	70	55	134	138	141	198
Context Number	5092	5162	3310	4309	4326	4438	8248
Feature Number	5090	5160	3305		4325	3115	8249
Tenement Number	179	180	237	237	237	237	242
Context Type	pit	pit	pit	burnt wood	pit	pit	post hole
CHARRED PLANT REMAINS continued...							
Weed/ Wild Plants continued...							
POACEAE - culm node	1	-	6	-	-	-	-
POACEAE - culm base	-	-	-	-	-	-	-
Unidentified	143	2	70	-	8	-	-
Unidentified - bud	-	-	-	-	-	-	-
Unidentified - calyx/ leaf	-	-	-	-	-	-	-
Unidentified - culm base/ tuber (fragments)	-	-	-	-	-	-	-
Unidentified - flower	-	-	-	-	-	-	-
Unidentified - seed pod	-	-	-	-	-	-	-
Unidentified - stalk	-	-	7	-	-	-	-
Indeterminate - poorly preserved seed/ internal structures	-	-	-	-	-	32	500
Indeterminate - highly vitrified amorphous plant material	100	11	50	9	14	25	-
MINERALISED PLANT REMAINS							
Cereal Chaff							
Cereal/ POACEAE - indeterminate straw fragments	-	++	-	-	-	-	-
Fruit							
<i>Ficus carica</i> L.	-	-	-	-	-	27	-
<i>Rubus</i> section <i>Rubus</i>	-	-	-	-	-	-	-
<i>Rubus</i> section <i>Rubus</i> (part charred)	-	-	-	-	-	1	-
<i>Pyrus</i> sp./ <i>Malus</i> sp. - indeterminate	-	-	-	-	-	-	-
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel	-	6	-	-	-	69	-
<i>Sambucus nigra</i> L.	-	-	-	-	-	-	1
<i>Sambucus nigra</i> L. (part charred)	-	-	-	-	-	-	-
Weed/ Wild							
<i>Papaver rhoeas</i> L.	-	-	-	-	-	-	-
<i>Papaver rhoeas</i> L./ <i>dubium</i> L.	-	1	-	-	-	-	-
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - internal structure	-	-	-	-	-	-	-
BRASSICACEAE - fragment of base of silique (? <i>Sinapis arvensis</i> L.)	-	-	-	-	-	-	-
cf. FABACEAE - seed coat	-	-	-	-	-	-	1
<i>Lithospermum arvense</i> L.	-	-	-	-	-	1	-
<i>Mentha</i> spp.	-	-	-	-	-	-	-
<i>Galium</i> sp. - small-sized	-	-	1	-	-	-	-
APIACEAE - <i>Salvia</i> spp. type	-	-	-	-	-	-	-
<i>Carduus</i> spp./ <i>Cirsium</i> spp.	-	-	-	-	-	-	-
<i>Chrysanthemum segetum</i> L.	-	-	-	-	-	-	-
ASTERACEAE - internal structure, small-sized achene	-	-	-	-	-	-	-
<i>Carex</i> spp. - 2-sided	-	-	-	-	-	-	-
<i>Carex</i> spp. - 3-sided	-	-	-	-	-	-	-
<i>Carex</i> spp. - indet. Internal structure	-	-	-	-	-	-	-

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	69	70	55	134	138	141	198
Context Number	5092	5162	3310	4309	4326	4438	8248
Feature Number	5090	5160	3305		4325	3115	8249
Tenement Number	179	180	237	237	237	237	242
Context Type	pit	pit	pit	burnt wood	pit	pit	post hole
MINERALISED PLANT REMAINS continued...							
Weed/ Wild Plants continued...							
CYPERACEAE - indeterminate	-	-	-	-	-	-	-
POACEAE - small-sized caryopsis	-	-	-	-	-	4	-
Unidentified	-	+	-	-	-	-	-
Indeterminate seed coat - ?fruit (e.g. plum/ cherry/ fig)	-	-	-	-	-	25	-
Indeterminate - poorly preserved seed/ internal structure	-	++	2000 ^E	-	-	-	-
Indeterminate amorphous mineralised concretions	-	-	-	-	-	-	-
OTHER REMAINS							
Fungal bodies - unidentified	-	-	-	-	-	-	-
Insect - indet (charred)	-	-	-	-	-	-	-
						[†] includes nutshell from 10-4mm HR	
Total Charred Plant Remains	986	143	414	47	344	190	1397
Total Mineralised Plant Remains	0	36	2001	0	0	127	2
TOTAL Charred and Mineralised Plant Remains	986	179	2415	47	344	317	1399

*all results are only for that portion of the flot which was sorted

N^E = estimated count.

N[†] = items from heavy residue included in count.

Key: + = < 5 items, ++ = 5 - 25 items, +++ = 25 - 50 items, ++++ = 50 - 100 items

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	193	195
Context Number	8091	8193
Feature Number		8200
Tenement Number	243	243
Context Type	floor layer	pit
Phase	AN	AN
Sample Volume (L.)	40	20
Flot Volume (ml)	320 ml	90 ml
Proportion of flot sorted*	25%	50%
Seeds/ litre (calculated on total CPR & MPR)	84.9	16.6

Latin Binomial

CHARRED PLANT REMAINS

Cereal Grain

<i>Avena</i> cf. <i>sativa</i> L. - germinated	-	-
<i>Avena</i> spp./ <i>Secale cereale</i> L. - indeterminate	-	1
<i>Hordeum</i> sp. - hulled	-	29
<i>Hordeum</i> sp.	4	-
cf. <i>Hordeum</i> sp. - germinated	-	-
cf. <i>Hordeum</i> sp.	-	5
<i>Secale cereale</i> L.	-	-
cf. <i>Secale cereale</i> L.	-	-
<i>Secale cereale</i> L./ <i>Triticum</i> sp.	-	-
<i>Triticum</i> cf. <i>spelta</i> L.	-	-
<i>Triticum</i> sp. - free-threshing type	-	-
<i>Triticum</i> sp. - indeterminate	24	4
<i>Triticum</i> sp. - germinated	-	-
Cereal - indeterminate	5	5
Cereal/ POACEAE - indeterminate	3 ^E	21

Embryo/ Coleoptile

Cereal/ POACEAE - detached coleoptile	500	-
Cereal/ POACEAE - detached embryo	2	2
cf. Cereal/ POACEAE - detached embryo		

Cereal Chaff

<i>Avena sativa</i> L. - floret base	-	-
<i>Avena</i> cf. <i>sativa</i> L. - floret base	-	-
cf. <i>Hordeum</i> sp. - rachis node	-	-
<i>Hordeum</i> sp./ <i>Secale cereale</i> L. - indeterminate rachis node	-	-
<i>Secale cereale</i> L. - rachis node	4	-
<i>Triticum aestivum</i> L./ <i>compactum</i> Host. - type rachis node	-	-
<i>Triticum</i> sp. - indet. free-threshing rachis node	-	1
<i>Triticum</i> sp. - rachis node	-	-
Cereal - indeterminate rachis node	-	-
Cereal - indeterminate rachis internode	-	-
Cereal/ POACEAE - indet. basal rachis node	-	-
Cereal/ POACEAE - culm node	1	-
Cereal/ POACEAE - culm base	1	-
cf. Cereal/ POACEAE - culm base	-	-

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	193	195
Context Number	8091	8193
Feature Number		8200
Tenement Number	243	243
Context Type	floor layer	pit
CHARRED PLANT REMAINS continued...		
Pulses		
<i>Vicia faba</i> L. var minor	-	-
<i>Vicia</i> cf. <i>faba</i> L. var. minor	-	-
cf. <i>Vicia</i> cf. <i>faba</i> L. var. minor	-	-
<i>Vicia</i> spp./ <i>Pisum sativum</i> L.	-	-
<i>Pisum sativum</i> L.	1	1 ^E
<i>Pisum sativum</i> L. - detached hilum		
Fruit/ Nut		
<i>Corylus avellana</i> L. - nutshell (estimate whole nut)	1	1
<i>Rubus</i> section <i>Rubus</i>	-	-
<i>Fragaria vesca</i> L.	-	1
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens	-	-
<i>Prunus cerasus</i> L.	-	-
cf. <i>Prunus avium</i> (L.) L./ <i>cerasus</i> L. - stone fragment	-	-
<i>Vitis vinifera</i> L. - immature	-	1
<i>Sambucus nigra</i> L.	-	-
cf. <i>Sambucus nigra</i> L.	-	1
Unidentified nutshell/ fruit stone	-	-
Other Economic Plants		
<i>Papaver</i> cf. <i>somniferum</i> L.	-	1
? <i>Petroselinum crispum</i> (Mill.) Nyman ex A. W. Hill	-	-
Unidentified - fruit stone/ nut shell (fragments)	-	-
Weed/ Wild		
<i>Pteridium aquilinum</i> (L.) Kuhn - leaf	-	-
<i>Ranunculus acris</i> L./ <i>repens</i> L./ <i>bulbosus</i> L.	-	-
<i>Ranunculus</i> subg. RANUNCULUS	-	-
<i>Ranunculus</i> spp. - internal structure	1	-
cf. <i>Ranunculus</i> subg. RANUNCULUS	-	-
<i>Papaver rhoeas</i> L./ <i>dubium</i> L.	-	-
<i>Papaver</i> spp./ <i>Glaucium flavum</i> Crantz	-	1
<i>Urtica dioica</i> L.	-	-
<i>Chenopodium</i> spp. (clearly charred)	4	2
<i>Chenopodium</i> spp. (? ancient)	-	-
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - internal structure	-	-
<i>Atriplex</i> spp.	-	-
<i>Atriplex</i> spp. (? ancient)	-	-
CHENOPODIACEAE/ CARYOPHYLLACEAE - indeterminate	-	-
<i>Stellaria media</i> L. - agg.	-	-
<i>Cerastium</i> spp.	1	-
cf. <i>Spergula arvensis</i> L.	-	1
<i>Agrostemma githago</i> L.	-	-

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	193	195
Context Number	8091	8193
Feature Number		8200
Tenement Number	243	243
Context Type	floor layer	pit
CHARRED PLANT REMAINS continued...		
Weed/ Wild Plants continued...		
<i>Agrostemma githago</i> L. - internal structure	3	-
cf. <i>Agrostemma githago</i> L.	-	-
cf. <i>Agrostemma githago</i> L. - calyx	-	-
cf. <i>Agrostemma githago</i> L. - internal structure	-	-
<i>Silene</i> spp.	-	-
cf. <i>Silene</i> spp.	-	-
CARYOPHYLLACEAE - indeterminate internal structure	-	-
<i>Malva</i> spp.	2	-
<i>Malva</i> spp. - seed head, with seeds (seed counted)	-	2
MALVACEAE - unident (? <i>Alcea rosea</i> L.)	1	-
<i>Persicaria</i> spp.	-	1
<i>Polygonum aviculare</i> L.	-	-
<i>Polygonum</i> cf. <i>aviculare</i> L.	-	-
<i>Polygonum</i> spp.	-	-
<i>Polygonum</i> spp. - immature	-	-
<i>Fallopia convolvulus</i> (L.) Á. Löve	-	-
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - indet. internal structure	-	-
<i>Rumex</i> spp.	-	-
<i>Rumex</i> spp. - detached turbucle	1	-
<i>Brassica</i> spp./ <i>Sinapis</i> spp.	-	-
cf. <i>Brassica</i> sp. - small-sized	-	1
<i>Raphanus raphanistrum</i> L. - capsule segment	1	2
cf. <i>Raphanus raphanistrum</i> L.	-	-
cf. <i>Raphanus raphanistrum</i> L. - capsule segment	-	-
BRASSICACEAE - fragment of base of siliqua (? <i>Sinapis arvensis</i> L.)	-	-
<i>Primula</i> spp.	-	-
<i>Anagallis arvensis</i> L.	-	-
cf. PRIMULACEAE - unident	-	-
<i>Vicia</i> cf. <i>hirsuta</i> L.	-	-
<i>Vicia</i> spp./ <i>Lathyrus</i> spp.	3	3
<i>Melilotus</i> spp./ <i>Medicago</i> spp./ <i>Trifolium</i> spp.	-	1
FABACEAE - immature, possibly a pulse	-	-
cf. FABACEAE - seed pod fragment	-	-
cf. FABACEAE - hilum fragment	-	1
<i>Scandix pecten-veneris</i> L.	-	-
APIACEAE - unidentified	1	-
<i>Prunella vulgaris</i> L.	-	-
<i>Lycopus europaeus</i> L.	-	-
<i>Plantago major</i> L.	-	-
<i>Plantago media</i> L./ <i>lanceolata</i> L.	2	-
cf. <i>Plantago media</i> L./ <i>lanceolata</i> L.	-	-
<i>Euphrasia</i> spp./ <i>Odontites vernus</i> (Bellardi) Dumort	-	-
<i>Sherardia arvensis</i> L.	-	-

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	193	195
Context Number	8091	8193
Feature Number		8200
Tenement Number	243	243
Context Type	floor layer	pit
CHARRED PLANT REMAINS continued...		
Weed/ Wild Plants continued...		
cf. <i>Galium verum</i> L./ <i>mollugo</i> L. - type	-	-
<i>Galium aparine</i> L.	-	-
<i>Galium</i> spp.	2	-
<i>Valerianella dentata</i> (L.) Pollich	-	-
<i>Centaurea</i> spp.	1	-
cf. <i>Centaurea</i> spp.	-	-
<i>Lapsana communis</i> L.	-	-
cf. <i>Lapsana communis</i> L.	-	-
<i>Picris echioides</i> L.	-	-
<i>Anthemis cotula</i> L.	45	5
cf. <i>Anthemis cotula</i> L.	-	-
cf. <i>Anthemis cotula</i> L. - flower head with seed (seed quantified)	-	-
<i>Anthemis</i> spp./ <i>Chrysanthemum</i> sp. - indeterminate	-	-
<i>Chrysanthemum segetum</i> L.	6	1
<i>Tripleurospermum inodorum</i> (L.) Sch. Bip.	6	1
ASTERACEAE - internal structure small-sized achene	-	-
ASTERACEAE - indet.	-	-
cf. <i>Potamogeton</i> spp.	-	-
<i>Juncus</i> spp.	-	-
<i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link) Schult.	6	1
cf. <i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link) Schult.	-	2
<i>Isolepis setacea</i> (L.) R. Br.	-	-
<i>Carex</i> spp. - 2-sided	-	-
<i>Carex</i> spp. - 3-sided	2	-
CYPERACEAE - indeterminate, oval-shaped	-	-
CYPERACEAE - indeterminate, long, bevel-shaped (?Cyperus)	-	-
CYPERACEAE - indeterminate, seed coat fragment	-	-
cf. CYPERACEAE - unidentified	-	-
<i>Lolium</i> sp.	-	-
cf. <i>Lolium</i> sp. - floret for containing grain	-	-
<i>Avena</i> spp.	39	-
<i>Avena</i> spp. - germinated caryopsis	-	-
<i>Avena</i> spp. - awn fragments (unquantified)	-	+
<i>Avena</i> spp. - floret base	-	1
<i>Avena</i> spp. - glume (unquantified)	-	+
<i>Avena</i> spp. - rachilla	-	-
cf. <i>Avena</i> spp.	-	1
cf. <i>Avena</i> spp. - germinated	-	-
<i>Avena</i> spp./ <i>Bromus</i> spp.	-	15 ^E
<i>Avena</i> spp./ <i>Bromus</i> spp. - germinated	-	-
<i>Bromus</i> spp.	1	-
cf. <i>Bromus</i> spp.	-	-
POACEAE - indet. small-sized caryopsis	24	1

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	193	195
Context Number	8091	8193
Feature Number		8200
Tenement Number	243	243
Context Type	floor layer	pit
CHARRED PLANT REMAINS continued...		
Weed/ Wild Plants continued...		
cf. POACEAE - indet. small-sized caryopsis	-	-
POACEAE - indet. medium-sized caryopsis	-	2
POACEAE - indet. large-sized caryopsis	-	-
POACEAE - culm node	-	-
POACEAE - culm base	-	-
Unidentified	-	21
Unidentified - bud	-	-
Unidentified - calyx/ leaf	-	-
Unidentified - culm base/ tuber (fragments)	-	-
Unidentified - flower	-	-
Unidentified - seed pod	-	-
Unidentified - stalk	-	-
Indeterminate - poorly preserved seed/ internal structures	25	17
Indeterminate - highly vitrified amorphous plant material	100	-
MINERALISED PLANT REMAINS		
Cereal Chaff		
Cereal/ POACEAE - indeterminate straw fragments	-	-
Fruit		
<i>Ficus carica</i> L.	-	-
<i>Rubus</i> section <i>Rubus</i>	15	-
<i>Rubus</i> section <i>Rubus</i> (part charred)	1	-
<i>Pyrus</i> sp./ <i>Malus</i> sp. - indeterminate	-	-
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel	-	-
<i>Sambucus nigra</i> L.	6	1
<i>Sambucus nigra</i> L. (part charred)	1	-
Weed/ Wild		
<i>Papaver rhoeas</i> L.	2	-
<i>Papaver rhoeas</i> L./ <i>dubium</i> L.	-	2
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - internal structure	-	-
BRASSICACEAE - fragment of base of silique (? <i>Sinapis arvensis</i> L.)	-	-
cf. FABACEAE - seed coat	-	-
<i>Lithospermum arvense</i> L.	-	-
<i>Mentha</i> spp.	-	-
<i>Galium</i> sp. - small-sized	-	-
APIACEAE - <i>Salvia</i> spp. type	-	-
<i>Carduus</i> spp./ <i>Cirsium</i> spp.	-	1
<i>Chrysanthemum segetum</i> L.	-	1
ASTERACEAE - internal structure, small-sized achene	-	-
<i>Carex</i> spp. - 2-sided	1	-

Table 2: Charred and mineralised plant remains from Anglo-Norman deposits continued..

Sample Number	193	195
Context Number	8091	8193
Feature Number		8200
Tenement Number	243	243
Context Type	floor layer	pit
MINERALISED PLANT REMAINS continued...		
Weed/ Wild Plants continued...		
<i>Carex</i> spp. - 3-sided	-	2
<i>Carex</i> spp. - indet. Internal structure	-	2
CYPERACEAE - indeterminate	-	-
POACEAE - small-sized caryopsis	-	-
Unidentified	-	-
Indeterminate seed coat - ?fruit (e.g. plum/ cherry/ fig)	-	-
Indeterminate - poorly preserved seed/ internal structure	-	-
Indeterminate amorphous mineralised concretions	-	-
OTHER REMAINS		
Fungal bodies - unidentified	-	-
Insect - indet (charred)	-	-
Total Charred Plant Remains	823	157
Total Mineralised Plant Remains	26	9
TOTAL Charred and Mineralised Plant Remains	849	166

*all results are only for that portion of the flot which was sorted

N^E = estimated count.

N[†] = items from heavy residue included in count.

Key: + = < 5 items, ++ = 5 - 25 items, +++ = 25 - 50 items, ++++ = 50 - 100 items

Table 3: Charred and mineralised plant remains from High Medieval deposits at Southampton French Quarter

Sample Number	96	101	51	99	102
Context Number	5240	3028	3185	3358	3357
Feature Number	5172	3028	3223		
Tenement Number	177	237	237	237	237
Context Type	pit	occupation layer	hearth	beam slot	occupation deposit
Sample Volume (L.)	40	5	40	6	20
Flot Volume (ml)	100 ml	520 ml	60 ml	50 ml	65 ml
Proportion of flot sorted*	100%	6.25%	25%	6.25%	100%
Seeds/ litre (calculated on total CPR & MPR)	26.3	2076.8	33.5	381.3	22.9
Latin Binomial					
Charred Plant Remains					
Cereal Grain					
<i>Avena cf. sativa</i> L.	-	-	-	-	-
<i>Avena cf. sativa</i> L. - within glume, floret base preserved	-	-	-	-	-
<i>Avena cf. sativa</i> L. - germinated	-	-	-	-	-
<i>Avena</i> spp./ <i>Secale cereale</i> L. - indeterminate	-	1	2	-	-
<i>Hordeum</i> sp. - hulled	-	5	6 ^E	-	-
<i>Hordeum</i> sp. - twisted	1	-	-	-	-
<i>Hordeum</i> sp.	-	-	4	1	-
<i>Hordeum</i> sp. - tail grain	-	5	-	-	-
cf. <i>Hordeum</i> sp.	-	-	-	-	-
<i>Secale cereale</i> L.	1	-	-	-	-
cf. <i>Secale cereale</i> L.	-	-	-	-	1
<i>Secale cereale</i> L./ <i>Triticum</i> sp.	-	6	-	-	37
<i>Secale cereale</i> L./ <i>Triticum</i> sp. - tail grain	-	1	-	-	-
<i>Triticum</i> sp. - free-threshing type	-	36	-	-	-
<i>Triticum</i> sp. - indeterminate	-	117	4	6	38
<i>Triticum</i> sp. - germinated	-	1	-	-	-
Cereal - indeterminate	-	60 ^E	7 ^E	4 ^E	10 ^E
Cereal/ POACEAE - indeterminate	1	55 ^E	20 ^E	2 ^E	30 ^E
Embryo/ Coleoptile					
Cereal/ POACEAE - detached coleoptile	-	180	6	-	87
Cereal/ POACEAE - detached embryo	-	8	8	6	13
Cereal Chaff					
<i>Avena cf. sativa</i> L. - floret base	-	-	-	-	-
<i>Hordeum</i> sp. - rachis node	-	-	1	-	1
<i>Hordeum</i> sp./ <i>Secale cereale</i> L. - indeterminate rachis node	-	3	1	-	2
<i>Secale cereale</i> L. - rachis node	-	5	-	-	9
cf. <i>Secale cereale</i> L. - rachis node	-	-	-	-	2
<i>Triticum</i> sp. - indet. free-threshing rachis node	-	-	-	-	1
<i>Triticum</i> sp. - rachis node	-	-	-	-	-
cf. <i>Triticum</i> sp. - rachis node	-	1	-	-	-
Cereal - indeterminate rachis internode	-	3	-	-	-
Cereal/ POACEAE - culm node	-	-	1	-	-
Cereal/ POACEAE - culm base	-	-	1	-	-
cf. Cereal/ POACEAE - culm base	-	-	-	-	-

Table 3: Charred and mineralised plant remains from High Medieval deposits continued...

Sample Number	96	101	51	99	102
Context Number	5240	3028	3185	3358	3357
Feature Number	5172	3028	3223		
Tenement Number	177	237	237	237	237
Context Type	pit	occupation layer	hearth	beam slot	occupation deposit
Pulses					
<i>Vicia</i> spp./ <i>Pisum sativum</i> L.	-	-	-	-	-
<i>Pisum sativum</i> L.	-	-	1	-	-
Fruit/ Nut					
<i>Juglans regia</i> L.	-	-	1	-	-
<i>Corylus avellana</i> L. - nutshell (estimate whole nut)	1	1	2	-	1
<i>Vitis vinifera</i> L.	-	-	-	-	-
<i>Sambucus nigra</i> L.	-	-	-	-	-
cf. <i>Sambucus nigra</i> L.	-	-	-	-	-
Unidentified - fruit stone/ nut shell (fragments)	-	-	-	-	-
Other Economic Plants					
<i>Linum usitatissimum</i> L.	-	-	-	-	-
Weed/ Wild					
<i>Ranunculus acris</i> L./ <i>repens</i> L./ <i>bulbosus</i> L.	-	-	2 ^E	-	-
<i>Ranunculus</i> subg. RANUNCULUS	-	-	-	-	-
<i>Glaucium flavum</i> Crantz	-	-	1	-	-
<i>Chenopodium</i> spp. (clearly charred)	-	-	13	-	-
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - internal structure	-	1	-	-	-
<i>Atriplex</i> spp.	-	-	2	-	-
CHENOPODIACEAE/ CARYOPHYLLACEAE - indeterminate	-	-	-	-	5
cf. <i>Moehringia trinervia</i> (L.) Clairv.	-	-	-	-	-
<i>Stellaria media</i> L. - agg.	-	-	1	-	-
<i>Cerastium</i> spp.	-	-	-	-	-
<i>Agrostemma githago</i> L.	-	2	-	-	1
cf. <i>Agrostemma githago</i> L.	-	1	-	-	-
cf. <i>Agrostemma githago</i> L. - internal structure	-	-	-	-	-
cf. <i>Silene</i> spp.	-	2	-	-	-
CARYOPHYLLACEAE - unidentified	-	-	-	-	-
<i>Malva</i> spp.	1	-	2	-	-
cf. MALVACEAE - indet. internal structure	-	-	-	-	1
<i>Persicaria</i> spp.	-	-	-	-	-
<i>Polygonum aviculare</i> L.	-	-	-	-	-
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - indet. internal structure	1	-	-	-	-
<i>Rumex</i> spp.	-	-	1	-	-
cf. <i>Lepidium</i> sp.	-	-	1	-	-
<i>Brassica</i> cf. <i>nigra</i> L.	-	-	2	-	-
<i>Raphanus raphanistrum</i> L.	-	-	-	-	-
<i>Raphanus raphanistrum</i> L. - capsule segment	-	1	-	-	-
cf. <i>Raphanus raphanistrum</i> L. - capsule segment	-	-	-	-	-
cf. <i>Anagallis arvensis</i> L.	-	-	1	-	-
<i>Vicia</i> spp./ <i>Lathyrus</i> spp.	2	7 ^E	5	-	-
cf. <i>Vicia</i> spp./ <i>Lathyrus</i> spp.	-	-	-	-	-

Table 3: Charred and mineralised plant remains from High Medieval deposits continued...

Sample Number	96	101	51	99	102
Context Number	5240	3028	3185	3358	3357
Feature Number	5172	3028	3223		
Tenement Number	177	237	237	237	237
Context Type	pit	occupation layer	hearth	beam slot	occupation deposit
Weed/ Wild Plants continued...					
<i>Torilis japonica</i> (Houtt.) DC.	-	1	-	-	-
<i>Hyoscyamus niger</i> L.	-	1	-	-	-
<i>Galeopsis</i> spp.	-	-	-	-	-
<i>Plantago media</i> L./ <i>lanceolata</i> L.	-	-	5	-	-
<i>Euphrasia</i> spp./ <i>Odontites vernus</i> (Bellardi) Dumort	-	-	-	-	-
<i>Galium</i> spp.	-	-	5	-	-
<i>Centaurea</i> spp.	-	-	2	-	-
<i>Anthemis cotula</i> L.	-	15	3	-	-
<i>Anthemis cotula</i> L. - flower head with seed (seed quantified)	-	-	-	-	-
<i>Chrysanthemum segetum</i> L.	-	-	1	-	-
<i>Tripleurospermum inodorum</i> (L.) Sch. Bip.	-	-	1	-	-
ASTERACEAE - internal structure small-sized achene	-	3	-	-	1
<i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link) Schult.	-	2	20	-	-
<i>Bolboschoenus maritimus</i> (L.) Palla/ <i>schoenoplectus</i> spp.	-	-	3	-	-
<i>Carex</i> spp. - 2-sided	-	-	2	-	2
<i>Carex</i> spp. - 3-sided	-	2	11	-	-
CYPERACEAE - unidentified	-	1	1	-	-
CYPERACEAE - indeterminate, long, bevel-shaped (?Cyperus)	-	-	3	-	-
<i>Cynosurus cristatus</i> L.	-	-	3	-	-
<i>Avena</i> spp.	-	-	-	115	-
<i>Avena</i> spp. - germinated caryopsis	1	-	-	-	-
<i>Avena</i> spp. - floret base	-	-	-	1	-
<i>Avena</i> spp. - glume (unquantified)	-	-	-	+	-
<i>Avena</i> spp. - rachilla	-	-	-	1	-
cf. <i>Avena</i> spp.	-	-	-	-	-
cf. <i>Avena</i> spp. - floret base	-	1	-	-	-
cf. <i>Avena</i> spp. - germinated	-	-	-	-	-
cf. <i>Avena</i> spp. - glume (unquantified)	-	-	-	-	-
<i>Avena</i> spp./ <i>Bromus</i> spp.	-	5	44	-	4
<i>Avena</i> spp./ <i>Bromus</i> spp. - germinated	-	-	6	-	-
cf. <i>Avena</i> spp./ <i>Bromus</i> spp.	-	4	-	-	-
<i>Bromus</i> spp.	-	1	5	-	-
POACEAE - indet. small-sized caryopsis	-	3	41	1	-
POACEAE - indet. medium-sized caryopsis	-	-	13	2	-
POACEAE - indet. large-sized caryopsis	-	-	-	-	-
POACEAE - indet. caryopses fragments (estimate of whole)	-	-	-	1	-
POACEAE - culm node	-	-	1	-	-
Unidentified	-	4	40 ^E	-	100 ^E
Unidentified - leaf (fragments)	-	-	4	-	-
Unidentified - fruit/ seed head	-	-	1	-	-
Unidentified - small flower (< 5 mm diameter)	-	-	4	-	-
Unidentified - medium-sized flower - ca. 5 - 10 mm diameter	-	-	5	-	-
Indeterminate - poorly preserved seed/ internal structures	-	-	-	-	100 ^E
Indeterminate - highly vitrified amorphous plant material	3	100 ^E	-	-	-

Table 3: Charred and mineralised plant remains from High Medieval deposits continued...

Sample Number	96	101	51	99	102
Context Number	5240	3028	3185	3358	3357
Feature Number	5172	3028	3223		
Tenement Number	177	237	237	237	237
Context Type	pit	occupation layer	hearth	beam slot	occupation deposit
MINERALISED PLANT REMAINS					
Cereals					
Cereal – unidentified bran (unquantified)	+++	-	-	-	-
Cereal/ POACEAE - indeterminate straw fragments (unquantified)	+	-	-	-	-
Pulses					
<i>Pisum sativum</i> L. - intact hilum	10	-	-	-	-
cf. FABACEAE - internal structure of pulse/ vetch	14	-	-	-	-
Fruit					
<i>Ficus carica</i> L.	549* ^E	-	-	-	-
<i>Ficus carica</i> L. – internal structure	150* ^E	-	-	-	-
<i>Rubus</i> section <i>Rubus</i>	-	-	-	-	-
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel	54	-	-	-	-
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - stone fragments	2* ^E	-	-	-	-
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens – rounded stone frags	23*	-	-	-	-
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel	14* ^E	-	-	-	-
? <i>Cydonia oblonga</i> Mill.	1	-	-	-	-
<i>Vitis vinifera</i> L.	38* ^E	-	-	-	-
cf. <i>Vitis vinifera</i> L.	10* ^E	-	-	-	-
<i>Sambucus nigra</i> L.	2	-	-	-	1
<i>Sambucus nigra</i> L. (part charred)	-	-	1	-	-
Other Economic Plants					
<i>Cuminum cyminum</i> L.	1	-	-	-	-
Tree/ Shrub					
<i>Betula</i> sp. - (wings of seed damaged - ?ancient)	-	-	-	-	-
Weed/ Wild					
<i>Urtica dioica</i> L.	-	-	-	-	-
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - indet, internal structure	-	-	-	-	-
CHENOPODIACEAE/ CARYOPHYLLACEAE - indet.	-	-	-	-	1
<i>Agrostemma githago</i> L. - internal structure	4* ^E	-	-	-	-
cf. <i>Agrostemma githago</i> L. - internal structure	10* ^E	-	-	-	-
cf. MALVACEAE - internal structure, fragmented	-	-	-	-	1
<i>Raphanus raphanistrum</i> L. - capsule segment	10* ^E	-	-	-	-
cf. <i>Vicia hirsuta</i> L.	-	-	-	-	-
<i>Epilobium</i> sp.	-	-	-	-	-
<i>Conium maculatum</i> L. (?dried-out waterlogged)	-	-	-	-	-
APIACEAE - unidentified	-	-	-	-	-
<i>Carduus</i> spp./ <i>Cirsium</i> spp.	-	-	-	-	-
ASTERACEAE - internal structure, small-sized achene	-	2	-	-	-
<i>Carex</i> spp. - 2-sided	-	-	-	-	1
<i>Carex</i> spp. - 3-sided	-	-	-	-	3
cf. <i>Avena</i> spp./ <i>Bromus</i> spp.	8* ^E	-	-	-	-
POACEAE - small-sized caryopsis	1	-	-	-	-

Table 3: Charred and mineralised plant remains from High Medieval deposits continued...

Sample Number	96	101	51	99	102
Context Number	5240	3028	3185	3358	3357
Feature Number	5172	3028	3223		
Tenement Number	177	237	237	237	237
Context Type	pit	occupation layer	hearth	beam slot	occupation deposit
Unidentified	17* ^E	-	-	-	4
Unidentified - seed capsule, extremely thin, oval-shaped (?Isatis)	-	-	-	-	-
Indeterminate seed coat - ?fruit (e.g. plum/ cherry/ fig)	-	-	-	3	-
Indeterminate - poorly preserved seed/ internal structure	120* ^E	2	-	-	-
Indeterminate amorphous mineralised concretions	++	-	-	-	-
OTHER REMAINS					
Fungal bodies - unidentified	40	-	15 ^E	-	-
Insect - indet (charred)	-	-	-	-	-
Total Charred Plant Remains	12	645	334	140	446
Total Mineralised Plant Remains	1038	4	1	3	11
TOTAL Charred and Mineralised Plant Remains	1050	649	335	143	457

*all results are only for that portion of the flot which was sorted

N^E = estimated count.

N[†] = items from heavy residue included in count.

Key: + = < 5 items, ++ = 5 - 25 items, +++ = 25 - 50 items, ++++ = 50 - 100 items

Table 3: Charred and mineralised plant remains from High Medieval deposits continued...

Sample Number	129	143	68	196
Context Number	3428	4442	5163	8241
Feature Number		4494	3332	
Tenement Number	237	237	237	241
Context Type	occupation deposit	pit	pit	burnt surface
Sample Volume (L.)	20	10	10	40
Flot Volume (ml)	70 ml	180 ml	15 ml	40 ml
Proportion of flot sorted*	100%	25%	100%	100%
Seeds/ litre (calculated on total CPR & MPR)	16.2	105.2	5.5	5.8
Latin Binomial				
Charred Plant Remains				
Cereal Grain				
<i>Avena</i> cf. <i>sativa</i> L.	-	118	-	-
<i>Avena</i> cf. <i>sativa</i> L. - within glume, floret base preserved	-	4	-	-
<i>Avena</i> cf. <i>sativa</i> L. - germinated	-	3	-	-
<i>Avena</i> spp./ <i>Secale cereale</i> L. - indeterminate	-	-	-	-
<i>Hordeum</i> sp. - hulled	4	-	-	-
<i>Hordeum</i> sp. - twisted	-	-	-	-
<i>Hordeum</i> sp.	-	-	-	2
<i>Hordeum</i> sp. - tail grain	-	-	-	-
cf. <i>Hordeum</i> sp.	2	-	-	-
<i>Secale cereale</i> L.	-	-	-	-
cf. <i>Secale cereale</i> L.	-	-	-	-
<i>Secale cereale</i> L./ <i>Triticum</i> sp.	2	-	-	-
<i>Secale cereale</i> L./ <i>Triticum</i> sp. - tail grain	-	-	-	-
<i>Triticum</i> sp. - free-threshing type	5	-	-	-
<i>Triticum</i> sp. - indeterminate	-	-	-	11
<i>Triticum</i> sp. - germinated	-	-	-	-
Cereal - indeterminate	-	-	-	2
Cereal/ POACEAE - indeterminate	10 ^E	-	-	42 ^E
Embryo/ Coleoptile				
Cereal/ POACEAE - detached coleoptile	1	18	-	1
Cereal/ POACEAE - detached embryo	1	-	-	1
Cereal Chaff				
<i>Avena</i> cf. <i>sativa</i> L. - floret base	-	6	-	-
<i>Hordeum</i> sp. - rachis node	-	-	-	-
<i>Hordeum</i> sp./ <i>Secale cereale</i> L. - indeterminate rachis node	-	1	-	-
<i>Secale cereale</i> L. - rachis node	-	1	-	-
cf. <i>Secale cereale</i> L. - rachis node	-	-	-	-
<i>Triticum</i> sp. - indet. free-threshing rachis node	-	-	-	-
<i>Triticum</i> sp. - rachis node	-	2	-	-
cf. <i>Triticum</i> sp. - rachis node	-	-	-	-
Cereal - indeterminate rachis internode	-	-	-	-
Cereal/ POACEAE - culm node	-	-	-	1
Cereal/ POACEAE - culm base	-	-	-	-
cf. Cereal/ POACEAE - culm base	-	-	-	-

Table 3: Charred and mineralised plant remains from High Medieval deposits continued...

Sample Number	129	143	68	196
Context Number	3428	4442	5163	8241
Feature Number		4494	3332	
Tenement Number	237	237	237	241
Context Type	occupation deposit	pit	pit	burnt surface
Pulses				
<i>Vicia</i> spp./ <i>Pisum sativum</i> L.	1	-	-	1
<i>Pisum sativum</i> L.	-	-	-	-
Fruit/ Nut				
<i>Juglans regia</i> L.	-	1	-	-
<i>Corylus avellana</i> L. - nutshell (estimate whole nut)	1	1	1	1
<i>Vitis vinifera</i> L.	1	-	-	1
<i>Sambucus nigra</i> L.	5	-	-	4
cf. <i>Sambucus nigra</i> L.				1
Unidentified - fruit stone/ nut shell (fragments)	3	-	-	-
Other Economic Plants				
<i>Linum usitatissimum</i> L.	-	-	-	1
Weed/ Wild				
<i>Ranunculus acris</i> L./ <i>repens</i> L./ <i>bulbosus</i> L.	-	-	-	-
<i>Ranunculus</i> subg. RANUNCULUS	-	1	-	-
<i>Glaucium flavum</i> Crantz	-	-	-	-
<i>Chenopodium</i> spp. (clearly charred)	1	-	1	4
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - internal structure	1	-	-	-
<i>Atriplex</i> spp.	-	-	-	3
CHENOPODIACEAE/ CARYOPHYLLACEAE - indeterminate	-	-	-	-
cf. <i>Moehringia trinervia</i> (L.) Clairv.	1	-	-	-
<i>Stellaria media</i> L. - agg.	-	-	-	-
<i>Cerastium</i> spp.	-	-	-	1
<i>Agrostemma githago</i> L.	-	-	-	-
cf. <i>Agrostemma githago</i> L.	-	-	-	-
cf. <i>Agrostemma githago</i> L. - internal structure	-	-	-	1
cf. <i>Silene</i> spp.	-	-	-	-
CARYOPHYLLACEAE - unidentified	9	-	-	-
<i>Malva</i> spp.	-	-	-	-
cf. MALVACEAE - indet. internal structure	-	-	-	-
<i>Persicaria</i> spp.	-	-	-	1
<i>Polygonum aviculare</i> L.	3	-	-	-
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - indet. internal structure	1	-	-	-
<i>Rumex</i> spp.	-	-	1	1
cf. <i>Lepidium</i> sp.	-	-	-	-
<i>Brassica</i> cf. <i>nigra</i> L.	-	-	-	1
<i>Raphanus raphanistrum</i> L.	1	-	-	-
<i>Raphanus raphanistrum</i> L. - capsule segment	2 ^E	-	-	-
cf. <i>Raphanus raphanistrum</i> L. - capsule segment	-	-	-	1
cf. <i>Anagallis arvensis</i> L.	-	-	-	-
<i>Vicia</i> spp./ <i>Lathyrus</i> spp.	8 ^E	4	1	1
cf. <i>Vicia</i> spp./ <i>Lathyrus</i> spp.	-	-	-	1
<i>Melilotus</i> spp./ <i>Medicago</i> spp./ <i>Trifolium</i> spp.	1	-	1	4

Table 3: Charred and mineralised plant remains from High Medieval deposits continued...

Sample Number	129	143	68	196
Context Number	3428	4442	5163	8241
Feature Number		4494	3332	
Tenement Number	237	237	237	241
Context Type	occupation deposit	pit	pit	burnt surface
<i>Lotus</i> spp./ <i>Melilotus</i> spp./ <i>Medicago</i> spp./ <i>Trifolium</i> spp.	3	-	-	-
<i>Torilis japonica</i> (Houtt.) DC.	-	-	-	-
<i>Hyoscyamus niger</i> L.	1	-	-	-
<i>Galeopsis</i> spp.	-	-	-	1
<i>Plantago media</i> L./ <i>lanceolata</i> L.	1	-	-	-
<i>Euphrasia</i> spp./ <i>Odontites vernus</i> (Bellardi) Dumort	-	-	-	1
<i>Galium</i> spp.	-	-	-	1 ^E
<i>Centaurea</i> spp.	-	2	-	-
<i>Anthemis cotula</i> L.	2	20	1	9
<i>Anthemis cotula</i> L. - flower head with seed (seed quantified)	-	8	-	-
<i>Chrysanthemum segetum</i> L.	-	5	-	2
<i>Tripleurospermum inodorum</i> (L.) Sch. Bip.	-	-	-	-
ASTERACEAE - internal structure small-sized achene	1	-	1	-
<i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link) Schult.	2	1	-	-
<i>Bolboschoenus maritimus</i> (L.) Palla/ <i>schoenoplectus</i> spp.	-	-	-	-
<i>Carex</i> spp. - 2-sided	1	-	-	-
<i>Carex</i> spp. - 3-sided	21	2	-	5
CYPERACEAE - unidentified	-	-	-	-
CYPERACEAE - indeterminate, long, bevel-shaped (?Cyperus)	-	-	-	-
<i>Cynosurus cristatus</i> L.	-	1	-	-
<i>Avena</i> spp.	-	-	-	-
<i>Avena</i> spp. - germinated caryopsis	-	-	-	-
<i>Avena</i> spp. - floret base	-	-	-	1
<i>Avena</i> spp. - glume (unquantified)	-	-	-	-
<i>Avena</i> spp. - rachilla	-	-	1	-
cf. <i>Avena</i> spp.	-	-	-	18
cf. <i>Avena</i> spp. - floret base	-	-	-	-
cf. <i>Avena</i> spp. - germinated	-	-	-	3
cf. <i>Avena</i> spp. - glume (unquantified)	-	+	-	-
<i>Avena</i> spp./ <i>Bromus</i> spp.	9 ^E	9	22	-
<i>Avena</i> spp./ <i>Bromus</i> spp. - germinated	-	-	-	-
cf. <i>Avena</i> spp./ <i>Bromus</i> spp.	-	-	-	-
<i>Bromus</i> spp.	-	1	1	-
POACEAE - indet. small-sized caryopsis	3	2	1	3
POACEAE - indet. medium-sized caryopsis	-	4	-	3
POACEAE - indet. large-sized caryopsis	-	5 ^E	-	8 ^E
POACEAE - indet. caryopses fragments (estimate of whole)	-	-	-	-
POACEAE - culm node	-	1	-	-
Unidentified	30	5	6	2
Unidentified - leaf (fragments)	-	-	-	-
Unidentified - fruit/ seed head	-	-	-	-
Unidentified - small flower (< 5 mm diameter)	-	-	-	-
Unidentified - medium-sized flower - ca. 5 - 10 mm diameter	-	-	-	-
Indeterminate - poorly preserved seed/ internal structures	64	35	3	73 ^E
Indeterminate - highly vitrified amorphous plant material	40	-	-	-

Table 3: Charred and mineralised plant remains from High Medieval deposits continued...

Sample Number	129	143	68	196
Context Number	3428	4442	5163	8241
Feature Number		4494	3332	
Tenement Number	237	237	237	241
Context Type	occupation deposit	pit	pit	burnt surface
Mineralised Plant Remains				
Cereals				
Cereal – unidentified bran (unquantified)	-	-	-	-
Cereal/ POACEAE - indeterminate straw fragments (unquantified)	-	-	+++	-
Fruit				
<i>Ficus carica</i> L.	-	-	-	-
<i>Ficus carica</i> L. – internal structure	-	-	-	-
<i>Rubus</i> section <i>Rubus</i>	-	-	-	1
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel	-	-	-	-
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - stone fragments	-	-	-	-
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens – rounded stone frags	-	-	-	-
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel	-	-	-	-
<i>Vitis vinifera</i> L.	-	-	-	-
cf. <i>Vitis vinifera</i> L.	-	-	-	-
? <i>Cydonia oblonga</i> Mill.	-	-	-	-
<i>Sambucus nigra</i> L.	65	1 ^E	10 ^E	2
<i>Sambucus nigra</i> L. (part charred)	-	-	-	-
Other Economic Plants				
<i>Cuminum cyminum</i> L.	-	-	-	-
Tree/ Shrub				
<i>Betula</i> sp. - (wings of seed damaged - ?ancient)	-	-	-	1
Weed/ Wild				
<i>Urtica dioica</i> L.	1	-	-	-
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - indet, internal structure	1	-	-	-
CHENOPODIACEAE/ CARYOPHYLLACEAE - indet.	-	-	-	-
<i>Agrostemma githago</i> L.	-	-	-	-
cf. <i>Agrostemma githago</i> L.	-	-	-	-
cf. MALVACEAE - internal structure, fragmented	-	-	-	-
<i>Raphanus raphanistrum</i> L. - capsule segment	1	-	-	-
cf. <i>Vicia hirsuta</i> L.	1	-	-	-
<i>Epilobium</i> sp.	-	-	-	1
<i>Conium maculatum</i> L. (?dried-out waterlogged)	-	-	-	1
APIACEAE - unidentified	-	-	-	2
<i>Carduus</i> spp./ <i>Cirsium</i> spp.	-	-	-	1
ASTERACEAE - internal structure, small-sized achene	-	-	1	-
<i>Carex</i> spp. - 2-sided	-	-	-	-
<i>Carex</i> spp. - 3-sided	-	-	-	-
POACEAE - small-sized caryopsis	-	1	-	-

Table 3: Charred and mineralised plant remains from High Medieval deposits continued...

Sample Number	129	143	68	196
Context Number	3428	4442	5163	8241
Feature Number		4494	3332	
Tenement Number	237	237	237	241
Context Type	occupation deposit	pit	pit	burnt surface
Unidentified	2	-	3	2
Unidentified - seed capsule, extremely thin, oval-shaped (?Isatis)	-	-	-	1
Indeterminate seed coat - ?fruit (e.g. plum/ cherry/ fig)	-	-	-	-
Indeterminate - poorly preserved seed/ internal structure	10	-	-	-
Indeterminate amorphous mineralised concretions	-	-	-	-
OTHER REMAINS				
Fungal bodies - unidentified	-	-	-	-
Insect - indet (charred)	-	-	-	-
Total Charred Plant Remains	242	261	41	218
Total Mineralised Plant Remains	81	2	14	12
TOTAL Charred and Mineralised Plant Remains	323	263	55	230

*all results are only for that portion of the flot which was sorted

N^E = estimated count.

N[†] = items from heavy residue included in count.

Key: + = < 5 items, ++ = 5 - 25 items, +++ = 25 - 50 items, ++++ = 50 - 100 items

Table 4: Charred and mineralised plant remains from Late Medieval and Post Medieval deposits at Southampton French Quarter

Sample Number	155	182	108	
Context Number	6148	8029	3640	5010
Feature Number	6144		3549	5180
Tenement Number	170	243	237	180
Context Type	cesspit	burnt layer	pit	pit
Phase	LMED	LMED	PMED	?PMED/ ?Modern Hand Picked
Sample Volume (L.)	40	40	40	
Flot Volume (ml)	150 ml	300 ml	100 ml	
Proportion of flot sorted*	25%	100%	100%	
Seeds/ litre (calculated on total CPR & MPR)	35.3	11.1	9.1	
Latin Binomial				
CHARRED PLANT REMAINS				
Cereal Grain				
<i>Hordeum</i> sp. - hulled	-	8	-	-
<i>Hordeum</i> sp. - hulled, germinated	-	-	3	-
<i>Hordeum</i> sp.	-	-	11	-
<i>Hordeum</i> sp. - tail grain	-	-	2	-
<i>Secale cereale</i> L./ <i>Triticum</i> sp.	-	1	-	-
<i>Triticum</i> sp. - free-threshing type	-	33	-	-
<i>Triticum</i> sp. - indeterminate	-	-	1 ^E	-
Cereal - indeterminate	-	10 ^E	2	-
Cereal/ POACEAE - indeterminate	-	21 ^E	11	-
Embryo/ Coleoptile				
Cereal/ POACEAE - detached coleoptile	-	1	5	-
Cereal/ POACEAE - detached embryo	-	3	1	-
Cereal Chaff				
<i>Hordeum</i> sp./ <i>Secale cereale</i> L. - indeterminate rachis node	-	1	-	-
<i>Triticum aestivum</i> L./ <i>compactum</i> Host. - type rachis node	3	-	-	-
<i>Triticum</i> sp. - indet. free-threshing rachis node	4	-	-	-
<i>Triticum</i> sp. - indet. free-threshing basal rachis node	1	-	-	-
<i>Triticum</i> sp. - rachis node	-	1	-	-
Cereal - indeterminate rachis node	3	1	-	-
Cereal/ POACEAE - culm node	1	1	-	-
Pulses				
<i>Vicia faba</i> L. var. <i>minor</i>	-	2	-	-
<i>Vicia</i> spp./ <i>Pisum sativum</i> L.	-	3 ^E	-	-
cf. <i>Vicia</i> spp./ <i>Pisum sativum</i> L. - immature	-	4	-	-
<i>Pisum sativum</i> L.	-	2	-	-

Table 4: CPR and MPR from Late Medieval and Post Medieval deposits continued...

Sample Number	155	182	108	
Context Number	6148	8029	3640	5010
Feature Number	6144		3549	5180
Tenement Number	170	243	237	180
Context Type	cesspit	burnt layer	pit	pit
Phase	LMED	LMED	PMED	?PMED/ ?Modern
CHARRED PLANT REMAINS continued...				
Fruit/ Nut				
<i>Corylus avellana</i> L. - nutshell (estimate whole nut)	-	1		
<i>Prunus cerasus</i> L.	-	4		
Unidentified nutshell/ fruit stone	-		3	
Unidentified - fruit stone/ nut shell (fragments)	-	1		
Other Economic Plants				
? <i>Petroselinum crispum</i> (Mill.) Nyman ex A. W. Hill	-	15 ^E		
Tree/ Shrub				
<i>Rosa</i> spp. - rosehip	-	1		
Weed/ Wild				
<i>Pteridium aquilinum</i> (L.) Kuhn - leaf	-	-	5	-
cf. <i>Urtica dioica</i> L.	-	1	-	-
<i>Chenopodium</i> spp. (clearly charred)	-	-	10	-
<i>Stellaria media</i> L. - agg.	1	-	-	-
<i>Agrostemma githago</i> L.	-	3	-	-
<i>Silene</i> spp.	-	-	3	-
cf. <i>Silene</i> spp.	-	-	1	-
CARYOPHYLLACEAE - unidentified	-	1	-	-
<i>Malva</i> spp.	-	1	-	-
<i>Rumex</i> spp.	-	-	3	-
cf. <i>Camelina sativa</i> (L.) Crantz.	-	3	-	-
<i>Raphanus raphanistrum</i> L. - capsule segment	-	1	-	-
<i>Vicia</i> spp./ <i>Lathyrus</i> spp.	-	2	1	-
<i>Melilotus</i> spp./ <i>Medicago</i> spp./ <i>Trifolium</i> spp.	-	7	1	-
cf. <i>Bupleurum rotundifolium</i> L.	-	2	-	-
APIACEAE - unidentified	-	2	-	-
LAMIACEAE - <i>Mentha</i> type.	-	1	-	-
<i>Sherardia arvensis</i> L.	-	1	1	-
<i>Galium</i> spp.	-	3	-	-
<i>Centaurea</i> spp.	-	2	1	-
<i>Anthemis cotula</i> L.	1	4	2	-
ASTERACEAE - internal structure small-sized achene	-	1	-	-
<i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link) Schult.	-	-	1	-
<i>Carex</i> spp. - 2-sided	-	2	-	-
<i>Carex</i> spp. - 3-sided	-	5	-	-
<i>Arrhenatherum elatius</i> var. <i>bulbosum</i> (Willd.) St.-Amans. - tuber	-	-	1	-
<i>Avena</i> spp.	-	1	-	-
<i>Avena</i> spp. - rachilla	1	-	-	-
<i>Avena</i> spp./ <i>Bromus</i> spp.	2	25	-	-

Table 4: CPR and MPR from Late Medieval and Post Medieval deposits continued...

Sample Number	155	182	108	
Context Number	6148	8029	3640	5010
Feature Number	6144		3549	5180
Tenement Number	170	243	237	180
Context Type	cesspit	burnt layer	pit	pit
Phase	LMED	LMED	PMED	?PMED/ ?Modern
CHARRED PLANT REMAINS continued...				
Weed/ Wild continued...				
POACEAE - indet. small-sized caryopsis	2	13	1	-
POACEAE - indet. medium-sized caryopsis	-	8	-	-
POACEAE - indet. large-sized caryopsis	3 ^E	-	-	-
cf. POACEAE - indet. large-sized caryopsis	-	1	-	-
POACEAE - culm node	2	-	-	-
POACEAE - basal culm node	-	-	1	-
Unidentified	2	81 ^E	25	-
Unidentified - leaf (fragments)	-	1	-	-
Unidentified - culm base/ tuber (fragments)	-	-	1	-
Indeterminate - poorly preserved seed/ internal structures	-	-	40 ^E	-
Indeterminate - highly vitrified amorphous plant material	50 ^E	150 ^E	50 ^E	-
MINERALISED PLANT REMAINS				
Cereals				
Cereal/ POACEAE – indeterminate grain	-	-	1	-
Cereal – bran (quantified)	+++	-	-	-
Fruit				
<i>Ficus carica</i> L.	190	-	8	-
cf. <i>Ficus carica</i> L. - internal structure		1	-	-
<i>Rubus</i> section <i>Rubus</i>	1	1	10	-
<i>Fragaria vesca</i> L.	-	-	5	-
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - stone frags	1	-	-	-
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel	11*	-	-	-
? <i>Cydonia oblonga</i> Mill.	1	-	-	-
<i>Vitis vinifera</i> L.	8*	-	1	-
<i>Sambucus nigra</i> L.	-	-	84	-
cf. <i>Sambucus nigra</i> L.	1	-	-	-
	-	-	-	-
Weed/ Wild				
<i>Glacium flavum</i> Crantz	-	-	1	-
<i>Chenopodium</i> spp.	-	-	22	-
cf. CARYOPHYLLACEAE - unidentified	1*	-	-	-
<i>Stellaria media</i> L. - agg.	-	-	2	-
<i>Silene</i> spp.	-	-	1	-
<i>Brassica</i> cf. <i>nigra</i> L.	-	-	1	-
<i>Raphanus raphanistrum</i> L. - capsule segment	1	-	-	-
cf. <i>Vicia</i> spp./ <i>Lathyrus</i> spp.	4	-	-	-
<i>Euphorbia peplus</i> L.	-	-	8	-
<i>Mentha</i> spp.	-	-	2	-
LAMIACEAE - unident (? <i>Stachys</i> type)	-	-	20	-
cf. <i>Oenanthe</i> sp.	-	-	1	-

Table 4: CPR and MPR from Late Medieval and Post Medieval deposits continued...

Sample Number	155	182	108	
Context Number	6148	8029	3640	5010
Feature Number	6144		3549	5180
Tenement Number	170	243	237	180
Context Type	cesspit	burnt layer	pit	pit
Phase	LMED	LMED	PMED	?PMED/ ?Modern
CHARRED PLANT REMAINS continued...				
Weed/ Wild plants continued...				
APIACEAE - unidentified	1*	-	-	-
<i>Hyoscyamus niger</i> L.	-	-	1	-
<i>Carex</i> spp. - 3-sided	2	-	4	-
POACEAE - small-sized caryopsis	-	-	1	-
Unidentified	39*	-	2	-
Indeterminate - poorly preserved seed/ internal structure	15* ^E	5	-	-
Indeterminate amorphous mineralised concretions	+++	-	-	-
MINERALISED/ DRIED-OUT WATERLOGGED/ ?DESICCATED				
Fruit/ Nut				
<i>Bertholletia excelsa</i> Humb. et Bonpl.	-	-	-	13
Total Charred Plant Remains	76	436	187	0
Total Mineralised Plant Remains	598	7	175	13
Total Charred and Mineralised Plant Remains	674	443	362	13

*all results are only for that portion of the flot which was sorted

N^E = estimated count.

N[†] = items from heavy residue included in count.

Key: + = < 5 items, ++ = 5 - 25 items, +++ = 25 - 50 items, ++++ = 50 - 100 items

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	HABITAT(S)	
Number of samples	6	16	9	2	1	1		
Latin Binomial								English Common Name
Charred Plant Remains								
Cereal Grain								
<i>Avena</i> cf. <i>sativa</i> L.							Cu	possible cultivated oat
<i>Avena</i> spp./ <i>Secale cereale</i> L.							Cu	indeterminate oat/ rye
<i>Hordeum</i> sp. - hulled							Cu	hulled barley
<i>Secale cereale</i> L.							Cu	rye
<i>Secale cereale</i> L./ <i>Triticum</i> sp.							Cu	indeterminat rye/ wheat
<i>Triticum</i> cf. <i>spelta</i> L.							Cu	possible spelt
<i>Triticum</i> sp. - possible glume wheat							Cu	glume wheat
<i>Triticum</i> sp. - free-threshing type							Cu	free-threshing wheat
<i>Triticum</i> sp. - indeterminate							Cu	indeterminate wheat
Cereal - indeterminate							Cu	indeterminate cereal
Cereal/ POACEAE - indeterminate							Cu	indeterminate cereal/ large grass
Embryo/ Coleoptile								
Cereal/ POACEAE - detached coleoptile							Cu	indeterminate cereal/ large grass
Cereal/ POACEAE - detached embryo							Cu	indeterminate cereal/ large grass
cf. Cereal/ POACEAE - detached embryo								possible indeterminate cereal/ large grass
Cereal Chaff								
<i>Avena sativa</i> L. - floret base							Cu	cultivated oat
<i>Avena</i> cf. <i>sativa</i> L. - floret base							Cu	possible cultivated oat
<i>Hordeum vulgare</i> L. - rachis node, six-row type							Cu	six-row barley
<i>Hordeum</i> sp. - rachis node							Cu	indeterminate barley
cf. <i>Hordeum</i> sp. - rachis node							Cu	possible barley

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter continued...

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	HABITAT(S)	
Number of samples	6	16	9	2	1	1		
Latin Binomial								English Common Name
Charred Plant Remains								
Cereal Chaff								
<i>Hordeum</i> sp./ <i>Secale cereale</i> L. - indeterminate rachis node							Cu	barley/ rye
<i>Secale cereale</i> L. - rachis node							Cu	rye
<i>Triticum aestivum</i> L./ <i>compactum</i> Host. - type rachis node							Cu	bread wheat/ club wheat
<i>Triticum</i> sp. - indet. free-threshing rachis node							Cu	indeterminate free-threshing wheat
<i>Triticum</i> sp. - rachis node							Cu	indeterminate wheat
Cereal - indeterminate rachis node							Cu	indeterminate cereal
Cereal - indeterminate rachis internode							Cu	indeterminate cereal
Cereal/ POACEAE - indet. basal rachis node							Cu	indeterminate cereal/ large grass
Cereal/ POACEAE - culm node							Cu	indeterminate cereal/ large grass
Cereal/ POACEAE - culm base							Cu	indeterminate cereal/ large grass
cf. Cereal/ POACEAE - culm base							Cu	possible indeterminate cereal/ large grass
Pulses								
<i>Vicia faba</i> L. var. minor							Cu	celtic/ field/ horse bean
<i>Vicia</i> cf. <i>faba</i> L. var. minor							Cu	celtic/ field/ horse bean
cf. <i>Vicia</i> cf. <i>faba</i> L. var. minor							Cu	possible celtic/ field/ horse bean
<i>Vicia</i> spp./ <i>Pisum sativum</i> L.							?Cu	vetch or garden pea
cf. <i>Vicia</i> spp./ <i>Pisum sativum</i> L.							?Cu	Possible vetch or garden pea
<i>Pisum sativum</i> L.							Cu	garden pea
<i>Pisum sativum</i> L. – detached hilum							Cu	garden pea
Fruit/ Nut								
<i>Juglans regia</i> L.							Cu	walnut

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter continued...

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	HABITAT(S)	
Number of samples	6	16	9	2	1	1		
Latin Binomial								English Common Name
Charred Plant Remains								
Fruit/ Nut continued...								
<i>Corylus avellana</i> L. – nutshell							H/ Wo/ Sc	hazel
<i>Rubus</i> section <i>Rubus</i>							TWa	blackberry/ raspberry
<i>Fragaria vesca</i> L.							H/ Wo/ Sc	wild/ alpine strawberry
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens							H or Cu	sloe/ plum/ greengage/ damson
<i>Prunus cerasus</i> L.							H or Cu	dwarf cherry
cf. <i>Prunus avium</i> (L.) L./ <i>cerasus</i> L. – stone fragment							H or Cu	possible bird/ dwarf cherry
<i>Vitis vinifera</i> L.							Cu (?Ex)	grape
<i>Vitis vinifera</i> L. – immature							Cu (?Ex)	grape
<i>Sambucus nigra</i> L.							H/ Wo/ Sc	elder
cf. <i>Sambucus nigra</i> L.							H/ Wo/ Sc	possible elder
Unidentified nutshell/ fruit stone							-	unidentified fruit/ nut
Other Economic Plants								
<i>Papaver</i> cf. <i>somniferum</i> L.							A/Wa or Cu	opium poppy
<i>Linum usitatissimum</i> L.							Cu	flax/ linseed
? <i>Petroselinum crispum</i> (Mill.) Nyman ex A. W. Hill							G/ Ge/ W	tentative identification of garden parsley
Tree/ Shrub								
<i>Rosa</i> spp. – rosehip							H/Wo/Sc or Cu	rose
Weed/ Wild								
<i>Pteridium aquilinum</i> (L.) Kuhn - leaf							Wo/ He/ Mo	bracken
<i>Ranunculus acris</i> L./ <i>repens</i> L./ <i>bulbosus</i> L.							Gr/ Me	meadow/ creeping/ bulbous buttercup

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter continued...

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	HABITAT(S)	
Number of samples	6	16	9	2	1	1		
Latin Binomial								English Common Name
Charred Plant Remains								
Weed/ Wild continued...								
<i>Ranunculus</i> subg. RANUNCULUS							TGr/ TMe	buttercup
cf. <i>Ranunculus</i> subg. RANUNCULUS							-	possible buttercup
<i>Ranunculus</i> spp. - internal structure							-	buttercup
<i>Papaver rhoeas</i> L./ <i>dubium</i> L.							A/ Di	common/ long-headed poppy
<i>Papaver</i> sp./ <i>Glaucium flavum</i> Crantz							A/ Di or Co	poppy/ yellow horned poppy
<i>Glaucium flavum</i> Crantz							Co	yellow horned poppy
<i>Urtica dioica</i> L.							Wo/ Wa/ TN	common nettle
cf. <i>Urtica dioica</i> L.							Wo/ Wa/ TN	possible common nettle
<i>Chenopodium</i> spp. (clearly charred)							-	goosefoot
<i>Chenopodium</i> spp. (? ancient)							-	goosefoot
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - internal structure							-	goosefoot/ orache
<i>Atriplex</i> spp.							-	orache
<i>Atriplex</i> spp. (? ancient)							-	orache
CHENOPODIACEAE/ CARYOPHYLLACEAE - indeterminate							-	Goosefoot Family/ Pinke Family
cf. <i>Moehringia trinervia</i> (L.) Clairv.							Wo/ He	three-nerved sandwort
<i>Stellaria media</i> L. - agg.							-	chickweed
<i>Cerastium</i> spp.							TGr	mouse-ear
<i>Spergula arvensis</i> L.							A	corn spurrey
cf. <i>Spergula arvensis</i> L.							A	possible corn spurrey
<i>Agrostemma githago</i> L.							A	corncockle
<i>Agrostemma githago</i> L. - internal structure							A	corncockle
cf. <i>Agrostemma githago</i> L.							A	possible corncockle
cf. <i>Agrostemma githago</i> L. - calyx							A	possible corncockle

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter continued...

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	HABITAT(S)	
Number of samples	6	16	9	2	1	1		
Latin Binomial								English Common Name
Charred Plant Remains								
Weed/ Wild continued...								
cf. <i>Agrostemma githago</i> L. - internal structure							A	possible corncockle
<i>Silene</i> spp.							TWo or TH	campion
cf. <i>Silene</i> spp.							TWo or TH	possible campion
CARYOPHYLLACEAE - unidentified							-	Pink Family
CARYOPHYLLACEAE - indeterminate internal structure							-	Pink Family
<i>Malva</i> spp.							-	mallow
<i>Malva</i> spp. - seed head, with seeds (seed counted)							-	mallow
MALVACEAE - unident (? <i>Alcea rosea</i> L.)							-	Mallow family (tentatively hollyhock)
cf. MALVACEAE - indet. Internal structure							-	possible Mallow Family
<i>Persicaria</i> spp.							TG	knotweed
<i>Polygonum aviculare</i> L.							TGr/ TA	knotgrass
<i>Polygonum</i> cf. <i>aviculare</i> L.							TGr/ TA	possible knotgrass
<i>Polygonum</i> spp.							TGr/ TA	knotgrass
<i>Polygonum</i> spp. - immature							-	immature knotweed
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - indet. internal structure							-	knotgrass/ dock/ sedge
<i>Fallopia convolvulus</i> (L.) Á. Löve							A	black-bindweed
cf. <i>Fallopia convolvulus</i> (L.) Á. Löve							A	possible black bindweed
<i>Rumex</i> spp.							TGr/ TWa/ TG	dock
<i>Rumex</i> spp. - detached turbucle							TGr/ TWa/ TG	dock
cf. <i>Camelina sativa</i> (L.) Crantz.							TA	gold-of-pleasure
cf. <i>Lepidium</i> sp.							-	possible pepperwort
<i>Brassica</i> cf. <i>nigra</i> L.							D/ R/ W	possible black mustard
<i>Brassica</i> spp./ <i>Sinapis</i> spp.							TA	cabbage/ mustard

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter continued...

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	HABITAT(S)	
Number of samples	6	16	9	2	1	1		
Latin Binomial								English Common Name
Charred Plant Remains								
Weed/ Wild continued...								
cf. <i>Brassica</i> sp. - small-sized							-	possible cabbage
<i>Raphanus raphanistrum</i> L.							TA/ R	wild radish
<i>Raphanus raphanistrum</i> L. - capsule segment							TA/ R	wild radish
cf. <i>Raphanus raphanistrum</i> L.							TA/ R	possible wild radish
cf. <i>Raphanus raphanistrum</i> L. - capsule segment							TA/ R	possible wild radish
BRASSICACEAE - fragment of base of silique (? <i>Sinapis arvensis</i> L.)							-	Mustard Family (tentatively like charlock)
<i>Reseda luteola</i> L.							Di/ TWa/ TA	weld (dyer's rocket)
<i>Primula</i> spp.							-	primrose
<i>Anagallis arvensis</i> L.							A/ Wa	scarlet pimpernel
cf. <i>Anagallis arvensis</i> L.							A/ Wa	possible scarlet pimpernel
cf. PRIMULACEAE - unident							-	possible Primrose Family
<i>Vicia</i> cf. <i>cracca</i> L.							Gr/ H	possible tufted vetch
<i>Vicia</i> cf. <i>hirsuta</i> (L.) Gray							Gr/ R	possible hairy tare
<i>Vicia sativa</i> L.							?Cu/ Wa	common vetch
<i>Vicia</i> spp./ <i>Lathyrus</i> spp.							TGr/ TA	vetch/ vetchling
cf. <i>Vicia</i> spp./ <i>Lathyrus</i> spp.							TGr/ TA	possible vetch/ vetchling
<i>Melilotus</i> spp./ <i>Medicago</i> spp./ <i>Trifolium</i> spp.							TGr/ TA	melilot/ medick/ clover
FABACEAE - immature, possibly a pulse							-	Pea Family
cf. FABACEAE - seed pod fragment							-	possible Pea Family
cf. FABACEAE - hilum fragment							-	possible Pea Family
<i>Scandix pecten-veneris</i> L.							A/Wa	shepherd's-needle
cf. <i>Bupleurum rotundifolium</i> L.							A	thorow-wax
<i>Torilis japonica</i> (Houtt.) DC.							Gr/ H/ Wo	upright hedge-parsley

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter continued...

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	
Number of samples	6	16	9	2	1	1	
Latin Binomial							English Common Name
Charred Plant Remains							
Weed/ Wild continued...							
APIACEAE - unidentified						-	Carrot Family
<i>Hyoscyamus niger</i> L.						Co/ R/ Wa	henbane
<i>Lithospermum arvense</i> L.						A/ R/ Gr	field gromwell
<i>Galeopsis</i> spp.						TA/ TR	hemp-nettle
<i>Prunella vulgaris</i> L.						Gr/ R	selfheal
<i>Lycopus europaeus</i> L.						Da/ W	gypsywort
LAMIACEAE – <i>Mentha</i> type						-	Mint Family
<i>Plantago major</i> L.						Gr/ R	greater plantain
<i>Plantago media</i> L./ <i>lanceolata</i> L.						Gr	hoary/ ribwort plantain
cf. <i>Plantago media</i> L./ <i>lanceolata</i> L.						Gr	possible hoary/ ribwort plantain
<i>Euphrasia</i> spp./ <i>Odontites vernus</i> (Bellardi) Dumort						TGr	eyebright/ red bartsia
<i>Sherardia arvensis</i> L.						A/ Wa/ Gr	field madder
<i>Galium verum</i> L./ <i>mollugo</i> L. - type						TGr/ ?H	lady's/ hedge bedstraw
cf. <i>Galium verum</i> L./ <i>mollugo</i> L. - type						TGr/ ?H	possible lady's/ hedge bedstraw
<i>Galium aparine</i> L.						TA/ H/ Sc	cleaver
<i>Galium</i> spp.						-	cleaver
<i>Valerianella dentata</i> (L.) Pollich						A/ R	narrow-fruited cornsalad
<i>Centaurea</i> spp.						TGr/ TWa	thistle
cf. <i>Centaurea</i> spp.						TGr/ TWa	possible thistle
<i>Lapsana communis</i> L.						Wo/ H/ Wa/ R	nipplewort
cf. <i>Lapsana communis</i> L.						Wo/ H/ Wa/ R	possible nipplewort
<i>Picris echioides</i> L.						Di/ R/ Wa	bristly oxtongue
<i>Anthemis cotula</i> L.						A	stinking chamomile

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter continued...

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	HABITAT(S)	
Number of samples	6	16	9	2	1	1		
Latin Binomial								English Common Name
Charred Plant Remains								
Weed/ Wild continued...								
<i>Anthemis cotula</i> L. - flower head with seed (seed quantified)							A	stinking chamomile
cf. <i>Anthemis cotula</i> L.							A	possible stinking chamomile
cf. <i>Anthemis cotula</i> L. - flower head with seed (seed quantified)							A	possible stinking chamomile
<i>Anthemis</i> spp./ <i>Chrysanthemum</i> sp. - indeterminate							A	stinking chamomile/ corn marigold
<i>Chrysanthemum segetum</i> L.							A	corn marigold
<i>Tripleurospermum inodorum</i> (L.) Sch. Bip.							A	scentless mayweed
ASTERACEAE - internal structure small-sized achene							-	Daisy Family
ASTERACEAE - indet.							-	Daisy Family
cf. <i>Potamogeton</i> spp.							W	possible pondweed
<i>Juncus</i> spp.							D/ W	rush
<i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link) Schult.							D/ W	common/ slender spike-rush
cf. <i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link) Schult.							D/ W	possible common/ slender spike-rush
<i>Bolboschoenus maritimus</i> (L.) Palla/ <i>Schoenoplectus</i> spp.							D/ W/ ?E	sea club-rush/ club rush
cf. <i>Bolboschoenus maritimus</i> (L.) Palla/ <i>Schoenoplectus</i> spp. - int'l strct.							D/ W/ ?E	possible sea club-rush/ club rush
<i>Isolepis setacea</i> (L.) R. Br.							D/ W/ F/ Ma	bristle club-rush
<i>Carex</i> spp. - 2-sided							D/ W	sedge
<i>Carex</i> spp. - 3-sided							D/ W	sedge
CYPERACEAE - unidentified							-	Sedge Family
CYPERACEAE - indeterminate, long, bevel-shaped (?Cyperus)							-	Sedge Family
CYPERACEAE - indeterminate, seed coat fragment							-	Sedge Family
cf. CYPERACEAE - unidentified							-	possible Sedge Family
<i>Lolium</i> sp.							TGr/ TA	rye-grass
cf. <i>Lolium</i> sp. - floret for containing grain							TGr/ TA	possible rye-grass

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter continued...

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	HABITAT(S)	
Number of samples	6	16	9	2	1	1		
Latin Binomial								English Common Name
Charred Plant Remains								
Weed/ Wild continued...								
<i>Cynosurus cristatus</i> L.							TGr	crested dog's-tail
<i>Poa</i> spp. - type caryopsis							TMe	meadow-grass type
<i>Arrhenatherum elatius</i> (L.) P. Beauv. Ex J. & C. Presl.							Gr/ R	false oat-grass
<i>Avena</i> spp.							TA/ ?Cu	wild/ cultivated oat
<i>Avena</i> spp. - germinated caryopsis							TA/ ?Cu	wild/ cultivated oat
<i>Avena</i> spp. - awn fragments (unquantified)							TA/ ?Cu	wild/ cultivated oat
<i>Avena</i> spp. - floret base							TA/ ?Cu	wild/ cultivated oat
<i>Avena</i> spp. - glume (unquantified)							TA/ ?Cu	wild/ cultivated oat
<i>Avena</i> spp. - rachilla							TA/ ?Cu	wild/ cultivated oat
cf. <i>Avena</i> spp.							TA/ ?Cu	possible wild/ cultivated oat
cf. <i>Avena</i> spp. - floret base							TA/ ?Cu	possible wild/ cultivated oat
cf. <i>Avena</i> spp. - germinated							TA/ ?Cu	possible wild/ cultivated oat
cf. <i>Avena</i> spp. - glume (unquantified)							TA/ ?Cu	possible wild/ cultivated oat
<i>Avena</i> spp./ <i>Bromus</i> spp.							TA/ ?Cu	wild or cultivated oat/ brome grass
<i>Avena</i> spp./ <i>Bromus</i> spp. - germinated							TA/ ?Cu	wild or cultivated oat/ brome grass
cf. <i>Avena</i> spp./ <i>Bromus</i> spp.							TA/ ?Cu	possible oat/ brome grass
<i>Bromus</i> spp.							TA	brome grass
cf. <i>Bromus</i> spp.							TA	possible brome grass
POACEAE - indet. small-sized caryopsis							-	small-seeded grass
POACEAE - indet. medium-sized caryopsis							-	medium-seeded grass
POACEAE - indet. large-sized caryopsis							-	large-seeded grass
cf. POACEAE - indet. large-sized caryopsis							-	possible large-seeded grass
POACEAE - indet. caryopses fragments (estimate of whole)							-	Grass Family

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter continued...

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	HABITAT(S)	
Number of samples	6	16	9	2	1	1		
Latin Binomial								English Common Name
Charred Plant Remains								
Weed/ Wild continued...								
POACEAE - culm node							-	wild grass culm node
POACEAE - basal culm node							-	
POACEAE - culm base							-	wild grass culm base
Unidentified							-	-
Unidentified - bud							-	-
Unidentified - leaf (fragments)							-	-
Unidentified - calyx/ leaf							-	-
Unidentified - culm base/ tuber (fragments)							-	-
Unidentified - fruit/ seed head							-	-
Unidentified - small flower (< 5 mm diameter)							-	-
Unidentified - medium-sized flower - ca. 5 - 10 mm diameter							-	-
Unidentified - seed pod							-	-
Unidentified - stalk							-	-
Indeterminate - poorly preserved seed/ internal structures							-	-
Indeterminate - highly vitrified amorphous plant material							-	-
Mineralised Plant Remains								
Cereals								
Cereal - unidentified bran							Cu	cereal
Cereal/ POACEAE - indeterminate straw fragments (unquantified)							Cu	cereal/ large grass
Pulses								
<i>Pisum sativum</i> L. - intact hilum							Cu	garden pea
cf. FABACEAE - internal structure of pulse/ vetch							Cu	possible Pea Family

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter continued...

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	HABITAT(S)	English Common Name
Number of samples	6	16	9	2	1	1		
Latin Binomial								
Mineralised Plant Remains								
Fruit/ Nut								
<i>Ficus carica</i> L.							Cu (?Ex)	fig
<i>Corylus avellana</i> L. - nutshell fragmnet							H/ Wo	hazelnut
<i>Rubus</i> section <i>Rubus</i>							H/ Wo/ TWa	blackberry/ raspberry
<i>Fragaria vesca</i> L.							H/ Wo/ Sc	
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - stones							Cu	plum/ bullace/ damson/ greengage
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel							Cu	sloe/ plum/ bullace/ damson/ greengage
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - indet. stone fragments							H or Cu	sloe/ plum/ bullace/ damson/ greengage
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - rounded stone fragments							H or Cu	sloe/ plum/ bullace/ damson/ greengage
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel							H or Cu	sloe/ plum/ bullace/ damson/ greengage
? <i>Cydonia oblonga</i> Mill.							Cu	tentative identification of quince
<i>Pyrus</i> sp./ <i>Malus</i> sp. - indeterminate							Cu	pear/ apple
<i>Vitis vinifera</i> L.							Cu (?Ex)	grape
cf. <i>Vitis vinifera</i> L.							Cu (?Ex)	possible grape
<i>Sambucus nigra</i> L.							H/ Wo/ Sc	elder
<i>Sambucus nigra</i> L. (part charred)							H/ Wo/ Sc	elder
cf. <i>Sambucus nigra</i> L.							H/ Wo/ Sc	possible elder
Other Economic Plants								
<i>Cuminum cyminum</i> L.							Cu	cumin
Tree/ Shrub								
<i>Betula</i> sp. - (wings of seed damaged - ?ancient)							Wo/ Sc	birch

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter continued...

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	HABITAT(S)	English Common Name
Number of samples	6	16	9	2	1	1		
Latin Binomial								
Mineralised Plant Remains								
Weed/ Wild continued...								
<i>Ranunculus</i> subg. RANUNCULUS							TGr/ TMe	buttercup
<i>Papaver rhoeas</i> L.							A/ Di	common poppy
<i>Papaver rhoeas</i> L./ <i>dubium</i> L.							A/ Di	common/ long-headed poppy
<i>Glacium flavum</i> L.							Co	yellow horned-poppy
<i>Urtica dioica</i> L.							Wo/ Wa/ TN	common nettle
<i>Chenopodium</i> sp.							-	goosefoot
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - indet, internal structure							-	goosefoot/ orache
CHENOPODIACEAE/ CARYOPHYLLACEAE - indet.							-	Goosefoot Family/ Pink Family
<i>Agrostemma githago</i> L. - internal structure							A	corncockle
cf. <i>Agrostemma githago</i> L. - internal structure							-	possible corncockle
<i>Stellaria media</i> L. – agg.							TGr	common stitchwort
<i>Silene</i> spp.							TWo/TH	campion
cf. CARYOPHYLLACEAE – indet.							-	Pink Family
cf. MALVACEAE - internal structure, fragmented							-	possible Mallow Family
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - internal structure							-	knotweed/ knotgrass/ sedge
<i>Brassica</i> cf. <i>nigra</i> L.							D/ R/ W	possible black mustard
<i>Raphanus raphanistrum</i> L. - capsule segment							TA/ R	wild radish
BRASSICACEAE - fragment of base of siliqua (? <i>Sinapis arvensis</i> L.)							-	Mustard Family
cf. <i>Vicia hirsuta</i> L.							Gr/ R	possible hairy tare
cf. <i>Vicia</i> spp./ cf. <i>Lathyrus</i> spp.							TGr/ TA	possible vetch/ vetchling
cf. FABACEAE - seed coat							-	possible Pea Family
<i>Epilobium</i> sp.							-	wilowherb
<i>Euphorbia peplus</i> L.							A/ Wa	petty spurge

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter continued...

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	HABITAT(S)	
Number of samples	6	16	9	2	1	1		
Latin Binomial								English Common Name
Mineralised Plant Remains								
Weed/ Wild continued...								
<i>Lithospermum arvense</i> L.							A/ R/ Gr	field gromwell
<i>Oenanthe</i> spp.							TD/ TW	water-dropwort
<i>Conium maculatum</i> L. (?dried-out waterlogged)							D/ W/ Wa	hemlock
APIACEAE - <i>Salvia</i> spp. type							-	Carrot Family - clary type
APIACEAE - unidentified							Co/ R/ Wa	Carrot Family
<i>Hyoscyamus niger</i> L.								henbane
<i>Mentha</i> spp.							-	mint
LAMIACEAE – unident (? <i>Stachys</i> type)							-	Mint Family
<i>Galium</i> sp. - small-sized							-	cleaver
<i>Carduus</i> spp./ <i>Cirsium</i> spp.							TGr/ Twa	thistle
<i>Chrysanthemum segetum</i> L.							A	corn marigold
ASTERACEAE - internal structure, small-sized achene							-	Daisy Family
<i>Juncus</i> spp.							D/ W	rush
<i>Carex</i> spp. - 2-sided							D/ W	sedge
<i>Carex</i> spp. - 3-sided							D/ W	sedge
<i>Carex</i> spp. - indet. Internal structure							D/ W	sedge
CYPERACEAE - indeterminate							-	Sedge Family
cf. <i>Avena</i> spp./ <i>Bromus</i> spp.							TA	possible oat/ brome grass
POACEAE - small-sized caryopsis							-	small-seeded grass

Table 5: Comparison of charred and mineralised plant macrofossils recovered from all phases at Southampton French Quarter continued...

Phase	LSAX	AN	HMED	LMED	PMED	PMED/ MODERN	HABITAT(S)	
Number of samples	6	16	9	2	1	1		
Latin Binomial								English Common Name
Mineralised Plant Remains								
Weed/ Wild continued...								
Unidentified								-
Unidentified - seed capsule, extremely thin, oval-shaped (?Isatis)								-
Indeterminate seed coat - ?fruit (e.g. plum/ cherry/ fig)								-
Indeterminate - poorly preserved seed/ internal structure								-
Indeterminate amorphous mineralised concretions								-
MINERALISED/ DRIED-OUT WATERLOGGED/ ?DESICCATED								
<i>Bertholletia excelsa</i> Humb. et Bonpl.							Cu (Ex)	Brazil nut

Habitat Codes (based on Stace 1997): A = weed of arable cultivation, Co = coastal (usually occurs on shingle), Cu = cultivated plant, Da = damp conditions, Di = disturbed ground, E = estuary (muddy coastal regions), F = fens, G = cultivated garden plant, Ge = frequent garden escape, Gr = grassland, H = hedgerows, He = heath, Ma = marshland, Me = meadow, Mo = moor, N = nitrogen enriched soils, R = rough ground, Sc = scrub, W = wet places (either waterside or water plants), Wa = waste places, Wo = woods. T = typically occurs. (Ex) = exotic and (?Ex) = possible exotic.

Table 6: Waterlogged Plant Remains from Anglo-Norman, High Medieval and Post-Medieval Phases at Southampton French Quarter

Sample Number	159	146	150	48	148
Correlates to Insect Sample Studied by Tetlow	204	969	971	n/a	203
Context Number	7169	4574	4817	1107	3168
Feature Number	7109	3145	4823	813	3169
Tenement Number	168	237	238	173	237
Context Type	Pit	Well	Well	Pit	cesspit
Phase	AN	AN	AN	HMED	PMED
Sample Volume (L.)	1 L	40 L	35 L	20 L	1 L
Flot Volume (ml/ L)	ca. 400 ml	ca. 1 L	ca. 2 L		
Proportion of flot sorted*	ca. 10%	ca. 15%	ca. 5%	100%	100%
Proportion of Heavy Residue sorted	n/a	100%	100%	n/a	100% >4mm/ 25% 4-2mm

Latin Binomial

WATERLOGGED PLANT REMAINS

English Common Name

Cereal Grain

Cereal - indeterminate, bran*	++++!!	++++	-	-	-	cereal/ large grass
-------------------------------	--------	------	---	---	---	---------------------

Pulses

FABACEAE - large-sized hilum (likely to be a cultivar)	2	-	-	-	-	Pea Family
--	---	---	---	---	---	------------

Fruit/ Nut

<i>Ficus carica</i> L.	-	2	-	5	300 ^E	fig
<i>Rubus</i> section <i>Rubus</i>	10	-	162	23 ^E	60	blackberry
<i>Rubus</i> section <i>Rubus</i> (smaller than other <i>Rubus</i> seed, and more beaked)	-	-	-	-	13	blackberry (although possibly raspberry)
<i>Rubus</i> section <i>Rubus</i> - internal structure	-	-	-	-	2	blackberry
<i>Fragaria vesca</i> L.	1	1	-	-	167	wild/ alpine strawberry
cf. <i>Prunus amygdalus</i> Batsch. - nutshell fragments (est whole nut)	-	-	-	2 ^E	-	possible almond

* Sample 159 has super-abundant unidentified cereal bran remains - easily several thousand fragments. N^E = estimated count.

Heavy residue scores have been combined with those from the flots for this table. However, the proportion of heavy residue sorted (often carried out in advance of assessment) can vary from that ultimately analysed for the flot. As a result, heavy residue scores are factored upward or downward for that proportion of flot sorted. (For example, if 100% of all heavy residue fractions were sorted by only ca. 10% of the flot was sorted, the heavy residue scores will all be divided by ten. If less than the factor has been sorted then the score is always 1). Taxa which include heavy residue results are indicated by grey shading.

Table 6: Waterlogged Plant Remains from Anglo-Norman, High Medieval and Post-Medieval Phases at Southampton French Quarter continued...

Sample Number	159	146	150	48	148	
Context Type	Pit	Well	Well	Pit	cesspit	
Phase	AN	AN	AN	HMED	PMED	
WATERLOGGED PLANT REMAINS						
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens	-	-	-	-	1	sloe/ plum/ bullace/ greengage/ damson
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - stone	2	-	23	-	1	plum/ bullace/ greengage/ damson
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel	-	-	-	22	-	plum/ bullace/ greengage/ damson
<i>Prunus cerasus</i> L.	-	-	5	-	-	dwarf cherry
cf. <i>Malus</i> sp. - endocarp fragment	10	-	1	-	-	possible apple (core fragment)
<i>Vitis vinifera</i> L.	-	1	-	-	2	grape
<i>Vitis vinifera</i> L. - immature	-	1	-	-	-	grape
<i>Sambucus nigra</i> L.	1	1	6	65 ^E	-	elder
Other Economic Plants						
<i>Papaver</i> cf. <i>somniferum</i> L.	-	7	1	-	-	opium poppy
<i>Linum usitatissimum</i> L.	-	-	1	-	-	flax/ linseed
<i>Linum usitatissimum</i> L. - capsule fragments	-	2	-	-	-	flax/ linseed
Tree/ Shrub						
cf. <i>Cornus sanguinea</i> L.	-	-	1	1	-	dogwood
Weed/ Wild						
<i>Ranunculus acris</i> L./ <i>repens</i> L./ <i>bulbosus</i> L.	-	-	-	-	2	meadow/ creeping/ bulbous buttercup
<i>Ranunculus</i> subg. RANUNCULUS	-	-	1	-	-	buttercup
<i>Papaver rhoeas</i> L./ <i>dubium</i> L.	-	2	-	1	-	common/ long-headed poppy
<i>Glaucium flavum</i> Crantz	-	-	-	3	-	yellow horned poppy
<i>Urtica dioica</i> L.	-	2	7	18	-	common nettle
<i>Myrica gale</i> L. - entire fruit	1	-	-	-	-	bog-myrtle
<i>Chenopodium</i> spp.	1	4	5	-	-	goosefoot
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - internal structure	-	-	-	2	-	goosefoot/ orache
<i>Atriplex</i> spp.	-	11	-	1	-	orache
cf. <i>Montia fontana</i> L.	1	-	-	-	-	possible blink
<i>Stellaria media</i> L. - agg.	-	1	-	-	-	chickweed

Table 6: Waterlogged Plant Remains from Anglo-Norman, High Medieval and Post-Medieval Phases at Southampton French Quarter continued...

Sample Number	159	146	150	48	148	
Context Type	Pit	Well	Well	Pit	cesspit	
Phase	AN	AN	AN	HMED	PMED	
WATERLOGGED PLANT REMAINS						
Weed/ Wild continued...						
<i>Cerastium</i> spp.	-	2	1	-	-	mouse-ear
<i>Agrostemma githago</i> L.	25 ^E	-	-	-	-	corncockle
<i>Silene</i> spp.	-	2	-	-	-	campion
<i>Silene</i> spp. - small-sized	-	1	-	-	-	campion
cf. <i>Silene</i> spp. - seed coat fragments (estimate whole seed)	-	3	-	-	1	possible campion
CARYOPHYLLACEAE - unidentified	-	1	-	-	-	Pink Family
CARYOPHYLLACEAE - indeterminate, minute seed coat fragments	-	-	250 ^E	-	-	Pink Family
<i>Persicaria</i> cf. <i>lapathifolia</i> (L.) Gray	-	-	2	-	-	possible pale persicaria
<i>Persicaria</i> spp.	-	-	2 ^E	-	-	knotgrass
<i>Polygonum aviculare</i> L.	-	1	-	-	-	knotgrass
<i>Polygonum</i> cf. <i>aviculare</i> L.	1	-	-	-	-	possible knotgrass
<i>Polygonum</i> spp.	-	1	-	-	-	knotweed
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - indet. internal structure	1	-	-	-	-	knotgrass/ dock/ sedge
<i>Rumex</i> spp.	-	2	-	-	-	dock
<i>Brassica</i> cf. <i>nigra</i> L.	-	9	-	-	-	possible black mustard
<i>Brassica</i> spp./ <i>Sinapis</i> spp.	-	-	1	-	-	cabbage/ mustard
<i>Raphanus raphanistrum</i> L.	2	-	-	1	-	wild radish
<i>Raphanus raphanistrum</i> L. - capsule segment	-	1	-	-	-	wild radish
cf. <i>Raphanus raphanistrum</i> L.	-	1	-	-	-	possible wild radish
<i>Reseda luteola</i> L.	-	23	-	-	1	weld
<i>Potentilla</i> spp.	-	1	-	-	-	cinquefoil
<i>Sanguisorba officinalis</i> L.	-	-	1	-	-	great burnet
cf. <i>Vicia</i> spp./ <i>Lathyrus</i> spp.	-	1	-	-	-	possible vetch/ vetchling
cf. FABACEAE - seed pod fragment	-	-	-	-	3	possible Pea Family
<i>Chaerophyllum temulum</i> L.	-	2	-	-	-	rough chervil

Table 6: Waterlogged Plant Remains from Anglo-Norman, High Medieval and Post-Medieval Phases at Southampton French Quarter continued...

Sample Number	159	146	150	48	148	
Context Type	Pit	Well	Well	Pit	cesspit	
Phase	AN	AN	AN	HMED	PMED	
WATERLOGGED PLANT REMAINS						
Weed/ Wild continued...						
<i>Bupleurum rotundifolium</i> L.	-	-	2	-	-	thorow-wax
<i>Apium graveolens</i> L.	-	-	3	-	-	wild/ cultivated celery
<i>Torilis japonica</i> (Houtt.) DC.	-	-	1	-	-	upright hedge-parsley
<i>Solanum nigrum</i> L.	1	-	-	-	-	nightshade
<i>Mentha aquatica</i> L.	-	-	-	1	-	water mint
LAMIACEAE - Stachys type	-	-	2	-	-	Mint Family - woundwort type
<i>Plantago media</i> L./ <i>lanceolata</i> L.	-	1	-	-	-	hoary/ ribwort plantain
? <i>Orobancha</i> spp.	-	-	-	1	-	tentative identification of broomrape
<i>Valerianella dentata</i> (L.) Pollich	-	1	-	-	-	narrow-fruited cornsalad
<i>Centaurea</i> spp.	-	2	-	-	-	thistle
<i>Lapsana communis</i> L.	-	-	2	1	-	nipplewort
<i>Picris echioides</i> L.	-	-	1	-	-	bristly oxtongue
<i>Anthemis cotula</i> L.	-	-	10	-	-	stinking chamomile
cf. <i>Anthemis cotula</i> L.	-	1	-	-	-	possible stinking chamomile
<i>Chrysanthemum segetum</i> L.	2 ^E	1	64	-	-	corn marigold
<i>Juncus</i> spp.	-	-	-	16	9	rush
cf. <i>Luzula</i> spp.	-	-	-	-	1	wood-rush
<i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link) Schult.	-	1	-	-	-	common/ slender spike-rush
<i>Bolboschoenus maritimus</i> (L.) Palla/ <i>Schoenoplectus</i> spp.	-	1	-	-	-	sea club-rush/ club rush
<i>Carex</i> spp. - 2-sided	-	1	-	-	-	sedge
<i>Carex</i> spp. - 3-sided	-	-	1	-	4	sedge
<i>Avena</i> spp. - floret base	2	-	-	-	-	wild/ cultivated oat
POACEAE - indet. small-sized caryopsis	-	2	5	1	-	small-seeded grass

Table 6: Waterlogged Plant Remains from Anglo-Norman, High Medieval and Post-Medieval Phases at Southampton French Quarter continued...

Sample Number	159	146	150	48	148	
Context Type	Pit	Well	Well	Pit	cesspit	
Phase	AN	AN	AN	HMED	PMED	
WATERLOGGED PLANT REMAINS						
Weed/ Wild continued...						
POACEAE - indet. medium-sized caryopsis	-	2	-	-	-	medium-seeded grass
cf. POACEAE - indet. large-sized caryopsis	-	-	3	-	-	possible large-seeded grass
POACEAE - glume	-	-	-	-	1	wild grass glume
Unidentified	-	2	3	3	-	-
Unidentified - bud	-	3	2	-	-	-
Unidentified - leaf/ scale (unquantified fragments)	2	++	-	-	2	-
Unidentified - fruit/ seed head	1	-	-	-	1	-
Unidentified - stalk	-	1	-	-	-	-
Unidentified - tunic fragment (? <i>Allium</i> sp.)	-	-	-	-	1	-
Unidentified - twig with small leaves (<i>Thymus</i> -like leaves)	1	-	-	-	-	-
OTHER WATERLOGGED REMAINS						
Moss	-	+	+	-	-	-
Fungal body	-	-	-	-	1	-
Charred plant remains						
Cereal Chaff						
<i>Triticum</i> sp. - indet. free-threshing basal rachis node (charred)	-	-	-	1	-	free-threshing wheat
Fruit/ Nut						
<i>Vitis vinifera</i> L. - charred	-	1	-	-	-	grape
Weed/ Wild						
Unidentified - bud (charred)	-	1	-	-	-	-
Indeterminate	-	-	-	-	1	-
Other Charred Plant Remains						
Minute charcoal fragmnets	-	-	-	-	+++	-

Table 6: Waterlogged Plant Remains from Anglo-Norman, High Medieval and Post-Medieval Phases at Southampton French Quarter continued...

Sample Number	159	146	150	48	148	
Context Type	Pit	Well	Well	Pit	cesspit	
Phase	AN	AN	AN	HMED	PMED	
MINERALISED PLANT REMAINS						
Fruits/ Nuts						
<i>Ficus carica</i> L.	-	10 ^E	-	-	2160 ^E	fig
<i>Corylus avellana</i> L. - nutshell fragments	-	-	1 ^E	-	-	hazel nutshell
<i>Rubus</i> section <i>Rubus</i>	-	-	-	-	481 ^E	blackberry/ raspberry (most likely blackberry)
<i>Rubus</i> cf. <i>idaeus</i> L.	-	-	-	-	80 ^E	possibly raspberry
<i>Fragaria vesca</i> L.	-	-	-	-	784 ^E	strawberry
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - stones	-	-	5 ^E	-	1	plum/ bullace/ damson/ greengage
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernels	-	-	1 ^E	-	-	plum/ bullace/ damson/ greengage
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - indet. stone frags	-	-	1 ^E	12	-	sloe/ plum/ bullace/ damson/ greengage
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - rounded stone frags	-	-	5 ^E	-	-	sloe/ plum/ bullace/ damson/ greengage
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - indet. kernel	-	-	-	-	22 ^E	sloe/ plum/ bullace/ damson/ greengage
<i>Pyrus</i> spp./ <i>Malus</i> spp. - indeterminate kernel	-	-	-	-	1	pear/ apple
<i>Vitis vinifera</i> L.	-	-	-	-	29 ^E	grape
Weed/ Wild Plants						
<i>Spergula arvensis</i> L.	-	-	-	-	16 ^E	corn spurrey
<i>Brassica</i> cf. <i>nigra</i> L.	-	5 ^E	-	-	-	possible black mustard
APIACEAE - unidentified	-	-	-	-	16 ^E	Carrot Family
<i>Carex</i> spp. - 2-sided	-	10 ^E	-	-	-	sedge
<i>Carex</i> spp. - 3-sided	-	-	-	-	16 ^E	sedge
POACEAE - small-sized caryopsis	-	5 ^E	-	-	-	small-seeded grass
Indeterminate - amorphous plant remains	-	190 ^E	-	20 ^E	-	-
Indeterminate - fruit skin/ seed coat	-	-	-	-	+	-
Total Waterlogged Plant Remains	67	105	569	167	572	
Total Mineralised Plant Remains	0	220	13	32	3606	
Total Charred Plant Remains	0	2	0	1	1	
TOTAL ALL IDENTIFICATIONS	67	327	582	200	4179	

*all results are only for that portion of the flot which was sorted, N^E = estimated count, N[†] = items from heavy residue included in count, Key: + = < 5 items, ++ = 5 - 25 items, +++ = 25 - 50 items, ++++ = 50 - 100 items. Shading of scores indicates those scores where a different portion of heavy residue was sorted than flot and the scores have been factored upward or downward accordingly (e.g. if 8 plum stones were recovered from a 100% of >10 mm heavy residue fraction but only 1/4 of the flot was sorted, the score reported will be 2 plum stones (e.g. 8 * 1/4).

Table 7: Comparison Saxon economic plants with other excavations in Southampton

Site	Southampton French Quarter	St Mary's Stadium	Six Dials	Melbourne Street	Glanville Street	Anderson's Road
Number of samples	6	2	6	10	2	37
Saxon Phase	LSAX	MSAX – LSAX	Saxon Unidf.	Saxon Unidf.	MSAX-LSAX	MSAX
Preservation type(s)	M & C	M & C	M	MCW	W/?M	MCW
Latin Binomial						
CHARRED PLANT REMAINS						
Cereals						
<i>Avena</i> spp. – indeterminate wild/ cultivated oat						
<i>Hordeum</i> sp. - hulled barley						
<i>Secale cereale</i> L. - rye						
<i>Triticum</i> sp. - possible glume wheat type						
<i>Triticum</i> sp. - free-threshing type						
<i>Triticum</i> sp. - indeterminate wheat						
Cereal – indeterminate						
Cereal/ POACEAE – indeterminate						
Pulses						
<i>Vicia faba</i> L. var. minor - broad bean						
<i>Vicia</i> sp./ <i>Pisum sativum</i> L. - vetch/ garden pea (? cultivated)						
<i>Pisum sativum</i> L. - garden pea						
Fruit/ Nut						
<i>Corylus avellana</i> L. - hazel nutshell						
Unidentified - fruit stone/ nut						
MINERALISED PLANT REMAINS (including dried-out waterlogged plant remains)						
Cereals						
Cereal – indeterminate grain						
Cereal – indeterminate bran						
Pulses						
<i>Vicia faba</i> L. var. minor - broad bean						
<i>Vicia</i> sp./ <i>Pisum sativum</i> L. - vetch/ garden pea (? cultivated)						
<i>Pisum sativum</i> L. - garden pea						
FABACEAE – indeterminate seed coat (testa) fragments/ detached hila						
Fruit/ Nut						
<i>Ficus carica</i> L. - internal structure fig						
<i>Corylus avellana</i> L. - hazel nutshell						
<i>Rubus</i> section Glandulosus Wimm. & Grab. - blackberry						
<i>Rubus</i> section Rubus - indeterminate blackberry/ raspberry						
<i>Rubus idaeus</i> L. - raspberry						
<i>Prunus spinosa</i> L. - sloe						
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - plum/ damson/ etc.						

Table 7: Comparison Saxon economic plants with other excavations in Southampton

Site	SOU 1382	St Mary's Stadium	Six Dials	Melbourne Street	Glanville Street	Anderson's Road
Number of samples	6	2	6	10	2	37
Saxon Phase	LSAX	MSAX – LSAX	Saxon Unif.	Saxon Unif.	MSAX-LSAX	MSAX
Preservation type(s)	M & C	M & C	M	MCW	W/?M	MCW
Fruit/ Nut						
<i>Prunus cf. avium</i> (L.) L. - dwarf cherry						
<i>Pyrus</i> spp./ <i>Malus</i> spp. - pear/ apple						
<i>Malus sylvestris</i> (L.) Mill. - crab apple						
<i>Vitis vinifera</i> L. - grape/ raisin						
<i>Sambucus nigra</i> L. - elder						
Flavourings/ Spices						
<i>Anethum graveolens</i> L. - dill						
WATERLOGGED PLANT REMAINS						
CEREAL						
<i>Secale cereale</i> L - rye						
FRUITS/ NUTS						
<i>Sambucus nigra</i> L. - elder						
Total Identifications Charred Plant Remains	1194	0	-	60	-	937+
Total Identifications Mineralised Plant Remains	475	152	-	-	-	77
Total Identifications Waterlogged Plant Remains	0	0	-	2602*	98	679+
TOTAL	1669	152	UN	2662	98†	1693

Data based on:
St. Mary's Stadium (Clapham 2005; Carruthers 2005a, 2005b; Hunter 2005)

Six Dials (Green 1992, Fiche 1:E3) – data unquantified.

*Melbourne Street (Monk 1980) – undifferentiated plant remains – cereal remains are described as charred, unclear whether mineralised or waterlogged for other economic plants – deposition conditions described as anaerobic (Monk 1980, 130).

†Glanville Street (Buckland *et al.* 1976) – samples are reported as waterlogged (Buckland *et al.* 1980, 62); no specification of mineralisation is put forward. Grape pip results from SAE XI F46 are not quantified (Buckland *et al.* 1980, 65)

+Anderson's Road (Stevens 2006) – some of the Anderson Road material was semi-quantified, scores are only for quantified data

Table 8: Comparison of Anglo-Norman plant macrofossils recovered from Southampton

SITE	Southampton French Quarter	Southampton Castle (Upper Bugle Street)	
Number of samples	19 C/M/W	1 C/W	
Latin Binomial			English Common Name
Charred Plant Remains			
Cereal Grain			
<i>Avena</i> cf. <i>sativa</i> L.			possible cultivated oat
<i>Avena</i> spp./ <i>Secale cereale</i> L.			indeterminate oat/ rye
<i>Hordeum</i> sp. - hulled			hulled barley
<i>Secale cereale</i> L.			rye
<i>Secale cereale</i> L./ <i>Triticum</i> sp.			indeterminat rye/ wheat
<i>Triticum</i> cf. <i>spelta</i> L.			possible spelt
<i>Triticum</i> sp. - free-threshing type			free-threshing wheat
<i>Triticum</i> sp. - indeterminate			indeterminate wheat
Cereal - indeterminate			indeterminate cereal
Cereal/ POACEAE - indeterminate			indeterminate cereal/ large grass
Embryo/ Coleoptile			
Cereal/ POACEAE - detached coleoptile			indeterminate cereal/ large grass
Cereal/ POACEAE - detached embryo			indeterminate cereal/ large grass
cf. Cereal/ POACEAE - detached embryo			possible indeterminate cereal/ large grass
Cereal Chaff			
<i>Avena sativa</i> L. - floret base			cultivated oat
<i>Avena</i> cf. <i>sativa</i> L. - floret base			possible cultivated oat
cf. <i>Hordeum</i> sp. - rachis node			possible barley
<i>Secale cereale</i> L. - rachis node			rye
<i>Triticum aestivum</i> L./ <i>compactum</i> Host. - type rachis node			bread wheat/ club wheat
<i>Triticum</i> sp. - indet. free-threshing rachis node			indeterminate free-threshing wheat
<i>Triticum</i> sp. - rachis node			indeterminate wheat
Cereal - indeterminate rachis node			indeterminate cereal
Cereal - indeterminate rachis internode			indeterminate cereal
Cereal/ POACEAE - indet. basal rachis node			indeterminate cereal/ large grass
Cereal/ POACEAE - culm node			indeterminate cereal/ large grass
Cereal/ POACEAE - culm base			indeterminate cereal/ large grass
cf. Cereal/ POACEAE - culm base			possible indeterminate cereal/ large grass
Pulses			
<i>Vicia faba</i> L. var. minor			celtic/ field/ horse bean
<i>Vicia</i> cf. <i>faba</i> L. var. minor			celtic/ field/ horse bean
cf. <i>Vicia</i> cf. <i>faba</i> L. var. minor			possible celtic/ field/ horse bean
<i>Vicia</i> spp./ <i>Pisum sativum</i> L.			vetch or garden pea
<i>Pisum sativum</i> L.			garden pea
<i>Pisum sativum</i> L. – detached hilum			garden pea

Table 8: Comparison of Anglo-Norman plant macrofossils recovered from Southampton

SITE NAME	Southampton French Quarter	Southampton Castle (Upper Bugle Street)	
Number of samples	16 CPR 3 WPR	1 C/W	
Latin Binomial			English Common Name
Charred Plant Remains			
Fruit/ Nut			
<i>Corylus avellana</i> L. – nutshell			hazel
<i>Rubus</i> section <i>Rubus</i>			blackberry/ raspberry
<i>Fragaria vesca</i> L.			wild/ alpine strawberry
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens			sloe/ plum/ greengage/ damson
<i>Prunus cerasus</i> L.			dwarf cherry
cf. <i>Prunus avium</i> (L.) L./ <i>cerasus</i> L. – stone fragment			possible bird/ dwarf cherry
<i>Vitis vinifera</i> L.			grape
<i>Vitis vinifera</i> L. – immature			grape
<i>Sambucus nigra</i> L.			elder
cf. <i>Sambucus nigra</i> L.			possible elder
Unidentified nutshell/ fruit stone			unidentified fruit/ nut
Other Economic Plants			
<i>Papaver</i> cf. <i>somniferum</i> L.			opium poppy
<i>Cannabis sativa</i> L.			hemp
? <i>Petroselinum crispum</i> (Mill.) Nyman ex A. W. Hill			tentative identification of garden parsley
Weed/ Wild			
<i>Pteridium aquilinum</i> (L.) Kuhn - leaf			bracken
<i>Ranunculus acris</i> L./ <i>repens</i> L./ <i>bulbosus</i> L.			meadow/ creeping/ bulbous buttercup
<i>Ranunculus</i> subg. RANUNCULUS			buttercup
cf. <i>Ranunculus</i> subg. RANUNCULUS			possible buttercup
<i>Ranunculus</i> spp. - internal structure			buttercup
<i>Papaver rhoeas</i> L./ <i>dubium</i> L.			common/ long-headed poppy
<i>Papaver</i> sp./ <i>Glaucium flavum</i> Crantz			poppy/ yellow horned poppy
<i>Urtica dioica</i> L.			common nettle
<i>Chenopodium</i> spp. (clearly charred)			goosefoot
<i>Chenopodium</i> spp. (? ancient)			goosefoot
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - internal structure			goosefoot/ orache
<i>Atriplex</i> spp.			orache
<i>Atriplex</i> spp. (? ancient)			orache
CHENOPODIACEAE/ CARYOPHYLLACEAE - indeterminate			Goosefoot Family/ Pinke Family
<i>Stellaria media</i> L. - agg.			chickweed
<i>Cerastium</i> spp.			mouse-ear
cf. <i>Spergula arvensis</i> L.			possible corn spurrey
<i>Agrostemma githago</i> L.			corncockle
<i>Agrostemma githago</i> L. - internal structure			corncockle
cf. <i>Agrostemma githago</i> L.			possible corncockle
cf. <i>Agrostemma githago</i> L. - calyx			possible corncockle

Table 8: Comparison of Anglo-Norman plant macrofossils recovered from Southampton

Site	Southampton French Quarter	Southampton Castle (Upper Bugle Street)	
Number of samples	19 C/M/W	1 C/W	
Latin Binomial			English Common Name
Charred Plant Remains			
Weed/ Wild continued...			
cf. <i>Agrostemma githago</i> L. - internal structure			possible corncockle
<i>Silene</i> cf. <i>vulgaris</i> Garcke			possible bladder campion
<i>Silene</i> spp.			campion
cf. <i>Silene</i> spp.			possible campion
CARYOPHYLLACEAE - indeterminate internal structure			Pink Family
<i>Malva</i> spp.			mallow
<i>Malva</i> spp. - seed head, with seeds (seed counted)			mallow
MALVACEAE - unident (? <i>Alcea rosea</i> L.)			Mallow family (tentatively hollyhock)
<i>Persicaria</i> spp.			knotweed
<i>Polygonum aviculare</i> L.			knotgrass
<i>Polygonum</i> cf. <i>aviculare</i> L.			possible knotgrass
<i>Polygonum</i> spp.			knotgrass
<i>Polygonum</i> spp. - immature			immature knotweed
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - indet. internal structure			knotgrass/ dock/ sedge
<i>Fallopia convolvulus</i> (L.) Á. Löve			black-bindweed
<i>Rumex</i> spp.			dock
<i>Rumex</i> spp. - detached turbucle			dock
<i>Brassica</i> spp./ <i>Sinapis</i> spp.			cabbage/ mustard
cf. <i>Brassica</i> sp. - small-sized			possible cabbage
<i>Raphanus raphanistrum</i> L. - capsule segment			wild radish
cf. <i>Raphanus raphanistrum</i> L.			possible wild radish
cf. <i>Raphanus raphanistrum</i> L. - capsule segment			possible wild radish
BRASSICACEAE - fragment of base of siliqua (? <i>Sinapis arvensis</i> L.)			Mustard Family (tenatively like charlock)
<i>Primula</i> spp.			primrose
<i>Anagallis arvensis</i> L.			scarlet pimpernel
cf. PRIMULACEAE - unident			possible Primrose Family
<i>Vicia</i> cf. <i>hirsuta</i> (L.) Gray			possible hairy tare
<i>Vicia</i> spp./ <i>Lathyrus</i> spp.			vetch/ vetchling
<i>Melilotus</i> spp./ <i>Medicago</i> spp./ <i>Trifolium</i> spp.			melilot/ medick/ clover
FABACEAE - immature, possibly a pulse			Pea Family
cf. FABACEAE - seed pod fragment			possible Pea Family
cf. FABACEAE - hilum fragment			possible Pea Family
<i>Scandix pecten-veneris</i> L.			shepherd's-needle
APIACEAE - unidentified			Carrot Family
<i>Prunella vulgaris</i> L.			selfheal
<i>Lycopus europaeus</i> L.			gypsywort
LAMIACEAE – <i>Mentha</i> type			Mint Family
<i>Plantago major</i> L.			greater plantain
<i>Plantago media</i> L./ <i>lanceolata</i> L.			hoary/ ribwort plantain

Table 8: Comparison of Anglo-Norman plant macrofossils recovered from Southampton

Site	Southampton French Quarter	Southampton Castle (Upper Bugle Street)	
Number of samples	19 C/M/W	1 C/W	
Latin Binomial			English Common Name
Charred Plant Remains			
Weed/ Wild continued...			
<i>cf. Plantago media L./ lanceolata L.</i>			possible hoary/ ribwort plantain
<i>Euphrasia spp./ Odontites vernus (Bellardi) Dumort</i>			eyebright/ red bartisia
<i>Sherardia arvensis L.</i>			field madder
<i>cf. Galium verum L./ mollugo L. - type</i>			possible lady's/ hedge bedstraw
<i>Galium aparine L.</i>			cleaver
<i>Galium spp.</i>			cleaver
<i>Valerianella dentata (L.) Pollich</i>			narrow-fruited cornsalad
<i>Centaurea spp.</i>			thistle
<i>cf. Centaurea spp.</i>			possible thistle
<i>Lapsana communis L.</i>			nipplewort
<i>cf. Lapsana communis L.</i>			possible nipplewort
<i>Picris echioides L.</i>			bristly oxtongue
<i>Anthemis cotula L.</i>			stinking chamomile
<i>Anthemis spp./ Chrysanthemum sp. - indeterminate</i>			stinking chamomile/ corn marigold
<i>Chrysanthemum segetum L.</i>			corn marigold
<i>Tripleurospermum inodorum (L.) Sch. Bip.</i>			scentless mayweed
ASTERACEAE - internal structure small-sized achene			Daisy Family
ASTERACEAE - indet.			Daisy Family
<i>cf. Potamogeton spp.</i>			possible pondweed
<i>Juncus spp.</i>			rush
<i>Eleocharis palustris (L.) Roem. & Schult./ uniglumis (Link) Schult.</i>			common/ slender spike-rush
<i>Isolepis setacea (L.) R. Br.</i>			bristle club-rush
<i>Carex spp. - 2-sided</i>			sedge
<i>Carex spp. - 3-sided</i>			sedge
CYPERACEAE - unidentified			Sedge Family
CYPERACEAE - indeterminate, long, bevel-shaped (?Cyperus)			Sedge Family
CYPERACEAE - indeterminate, seed coat fragment			Sedge Family
<i>cf. CYPERACEAE - unidentified</i>			possible Sedge Family
<i>Lolium sp.</i>			rye-grass
<i>cf. Lolium sp. - floret for containing grain</i>			possible rye-grass

Table 8: Comparison of Anglo-Norman plant macrofossils recovered from Southampton

Site	Southampton French Quarter	Southampton Castle (Upper Bugle Street)	
Number of samples	19 C/M/W	1 C/W	
Latin Binomial			English Common Name
Charred Plant Remains			
Weed/ Wild continued...			
<i>Avena</i> spp.			wild/ cultivated oat
<i>Avena</i> spp. - germinated caryopsis			wild/ cultivated oat
<i>Avena</i> spp. - awn fragments (unquantified)			wild/ cultivated oat
<i>Avena</i> spp. - floret base			wild/ cultivated oat
<i>Avena</i> spp. - glume (unquantified)			wild/ cultivated oat
<i>Avena</i> spp. - rachilla			wild/ cultivated oat
cf. <i>Avena</i> spp.			possible wild/ cultivated oat
cf. <i>Avena</i> spp. - germinated			possible wild/ cultivated oat
<i>Avena</i> spp./ <i>Bromus</i> spp.			wild or cultivated oat/ brome grass
<i>Avena</i> spp./ <i>Bromus</i> spp. - germinated			wild or cultivated oat/ brome grass
<i>Bromus</i> spp.			brome grass
cf. <i>Bromus</i> spp.			possible brome grass
POACEAE - indet. small-sized caryopsis			small-seeded grass
POACEAE - indet. medium-sized caryopsis			medium-seeded grass
POACEAE - indet. large-sized caryopsis			large-seeded grass
POACEAE - culm node			wild grass culm node
POACEAE - culm base			wild grass culm base
Unidentified			-
Unidentified - bud			-
Unidentified - calyx/ leaf			-
Unidentified - culm base/ tuber (fragments)			-
Unidentified - small flower (< 5 mm diameter)			-
Unidentified - seed pod			-
Unidentified - stalk			-
Indeterminate - poorly preserved seed/ internal structures			-
Indeterminate - highly vitrified amorphous plant material			-
Mineralised Plant Remains			
Cereals			
Cereal/ POACEAE - indeterminate straw fragments (unquantified)			cereal/ large grass
Fruit/ Nut			
<i>Ficus carica</i> L.			fig
<i>Rubus</i> section <i>Rubus</i>			blackberry/ raspberry
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - indet. frags.			sloe/ plum/ bullace/ damson/ greengage
<i>Pyrus</i> sp./ <i>Malus</i> sp. - indeterminate			pear/ apple
cf. <i>Vitis vinifera</i> L.			possible grape
<i>Sambucus nigra</i> L.			elder

Table 8: Comparison of Anglo-Norman plant macrofossils recovered from Southampton

Site	Southampton French Quarter	Southampton Castle (Upper Bugle Street)	
Number of samples	19 C/M/W	1 C/W	
Latin Binomial			English Common Name
Mineralised Plant Remains			
Weed/ Wild Plants			
<i>Papaver rhoeas</i> L.			common poppy
<i>Papaver rhoeas</i> L./ <i>dubium</i> L.			common/ long-headed poppy
<i>Papaver</i> cf. <i>argemone</i> L.			
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - internal structure			knotweed/ knotgrass/ sedge
BRASSICACEAE - fragment of base of silique (? <i>Sinapis arvensis</i> L.)			Mustard Family
cf. FABACEAE - seed coat			possible Pea Family
<i>Lithospermum arvense</i> L.			field gromwell
APIACEAE - <i>Salvia</i> spp. type			Carrot Family - clary type
<i>Mentha</i> spp.			mint
<i>Galium</i> sp. - small-sized			cleaver
<i>Carduus</i> spp./ <i>Cirsium</i> spp.			thistle
<i>Chrysanthemum segetum</i> L.			corn marigold
ASTERACEAE - internal structure, small-sized achene			Daisy Family
<i>Carex</i> spp. - 2-sided			sedge
<i>Carex</i> spp. - 3-sided			sedge
<i>Carex</i> spp. - indet. Internal structure			sedge
CYPERACEAE - indeterminate			Sedge Family
Unidentified			-
Indeterminate seed coat - ?fruit (e.g. plum/ cherry/ fig)			-
Indeterminate - poorly preserved seed/ internal structure			-
Indeterminate amorphous mineralised concretions			-
Waterlogged Plant Remains			
Cereal grain			
<i>Secale cereale</i> L.			rye
Cereal - indeterminate bran			cereal bran
Pulses			
FABACEAE - large-sized hilum (likely to be cultivar)			possible cultivated pulse
Fruit/ Nut			
<i>Ficus carica</i> L.			fig
<i>Corylus avellana</i> L.			hazel
<i>Rubus</i> section <i>Glandulosus</i> Wimm. & Grab.			blackberry
<i>Rubus</i> section <i>Rubus</i>			blackberry (possibly also raspberry)
<i>Rubus</i> section <i>Rubus</i> (smaller than other <i>Rubus</i> seed, and more beaked)			blackberry (possibly also raspberry)
<i>Rubus</i> section <i>Rubus</i> - internal structure			blackberry (possibly also raspberry)
<i>Fragaria vesca</i> L.			strawberry
cf. <i>Prunus amygdalus</i> Batsch. - nutshell fragments (est whole nut)			possible almond

Table 8: Comparison of Anglo-Norman plant macrofossils recovered from Southampton

Site	Southampton French Quarter	Southampton Castle (Upper Bugle Street)	
Number of samples	19 C/M/W	1 C/W	
Mineralised Plant Remains continued...			
Fruit/ Nut continued...			
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens			sloe/ plum/ damson/ bullace/ greengage
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - stone			plum/ damson/ bullace/ greengage
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel			plum/ damson/ bullace/ greengage
<i>Prunus cerasus</i> L.			dwarf cherry
cf. <i>Malus</i> sp. - endocarp fragment			possible apple
<i>Vitis vinifera</i> L.			grape (raisin)
<i>Vitis vinifera</i> L. - immature			grape (raisin)
<i>Sambucus nigra</i> L.			elder
Other Economic Plants			
<i>Papaver</i> cf. <i>somniferum</i> L.			possible opium poppy
<i>Linum usitatissimum</i> L.			flax/ linseed
<i>Linum usitatissimum</i> L. - capsule fragments			flax/ linseed
Tree/ Shrub			
<i>Fagus sylvatica</i> L. - bud			beech
<i>Sorbus</i> spp.			indet. whitebeam/ rowan
cf. <i>Cornus sanguinea</i> L.			dogwood
Weed/ Wild			
<i>Ranunculus acris</i> L./ <i>repens</i> L./ <i>bulbosus</i> L.			meadow/ creeping/ bulbous buttercup
<i>Ranunculus</i> subg. RANUNCULUS			buttercup
<i>Papaver rhoeas</i> L./ <i>dubium</i> L.			common/ long-headed poppy
<i>Papaver</i> cf. <i>argemone</i> L.			prickly poppy
<i>Glaucium flavum</i> Crantz			yellow horned poppy
<i>Urtica dioica</i> L.			common nettle
<i>Urtica urens</i> L.			small nettle
<i>Myrica gale</i> L. - entire fruit			bog-myrtle
<i>Chenopodium</i> cf. <i>album</i> L.			fat-hen
<i>Chenopodium</i> spp.			goosefoot
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - internal structure			goosefoot/ orache
<i>Atriplex</i> spp.			orache
cf. <i>Montia fontana</i> L.			possible blink
<i>Stellaria media</i> L. - agg.			chickweed
<i>Cerastium</i> spp.			mouse-ear
<i>Agrostemma githago</i> L.			corncockle
<i>Silene</i> cf. <i>vulgaris</i> Garcke			possible bladder campion
<i>Silene</i> spp.			campion
<i>Silene</i> spp. - small-sized			campion
cf. <i>Silene</i> spp. - seed coat fragments (estimate whole seed)			possible campion
CARYOPHYLLACEAE - unidentified			Pink Family
CARYOPHYLLACEAE - indeterminate, minute seed coat fragments			Pink Family

Table 8: Comparison of Anglo-Norman plant macrofossils recovered from Southampton

Site	Southampton French Quarter	Southampton Castle (Upper Bugle Street)	
Number of samples	19 C/M/W	1 C/W	
Waterlogged Plant Remains continued...			
Weed/ Wild Plants continued...			
<i>Persicaria</i> cf. <i>lapathifolia</i> (L.) Gray			possible pale persicaria
<i>Persicaria</i> spp.			knotgrass
<i>Polygonum aviculare</i> L.			knotgrass
<i>Polygonum</i> cf. <i>aviculare</i> L.			possible knotgrass
<i>Polygonum</i> spp.			knotweed
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - indet. internal structure			knotgrass/ dock/ sedge
<i>Rumex</i> spp.			dock
<i>Brassica</i> cf. <i>nigra</i> L.			possible black mustard
<i>Brassica</i> spp.			mustard
<i>Brassica</i> spp./ <i>Sinapis</i> spp.			cabbage/ mustard
<i>Raphanus raphanistrum</i> L.			wild radish
<i>Raphanus raphanistrum</i> L. - capsule segment			wild radish
cf. <i>Raphanus raphanistrum</i> L.			possible wild radish
<i>Reseda luteola</i> L.			weld
<i>Filipendula ulmaria</i> (L.) Maxim			meadowsweet
<i>Potentilla</i> spp.			cinquefoil
<i>Agrimonia</i> spp.			agrimony
<i>Sanguisorba officinalis</i> L.			great burnet
cf. <i>Vicia</i> spp./ <i>Lathyrus</i> spp.			possible vetch/ vetchling
cf. FABACEAE - seed pod fragment			possible Pea Family
<i>Linum</i> cf. <i>catharticum</i> L.			possible fairy flax
<i>Chaerophyllum temulum</i> L.			rough chervil
<i>Scandix pectenvenensis</i> L.			shepherd's-needle
<i>Conium maculatum</i> L.			hemlock
<i>Bupleurum rotundifolium</i> L.			thorow-wax
<i>Bupleurum</i> cf. <i>rotundifolium</i> L.			possible thorow-wax
<i>Apium graveolens</i> L.			wild/ cultivated celery
<i>Torilis japonica</i> (Houtt.) DC.			upright hedge-parsley
<i>Daucus carota</i> L.			wild carrot
APIACEAE - unidentified			Carrot Family
<i>Hyoscyamus niger</i> L.			henbane
<i>Solanum nigrum</i> L.			nightshade
<i>Ballota nigra</i> L.			black horehound
<i>Lamium</i> spp.			dead-nettle
<i>Mentha aquatica</i> L.			water mint
<i>Mentha</i> spp.			mint
LAMIACEAE - <i>Stachys</i> type			Mint Family - woundwort type
LAMIACEAE - unidentified			Mint Family
<i>Plantago media</i> L./ <i>lanceolata</i> L.			hoary/ ribwort plantain
? <i>Orobanche</i> spp.			tentative identification of broomrape
<i>Valerianella dentata</i> (L.) Pollich			narrow-fruited cornsalad
<i>Cirsium</i> spp.			thistle

Table 8: Comparison of Anglo-Norman plant macrofossils recovered from Southampton

Site	Southampton French Quarter	Southampton Castle (Upper Bugle Street)	
Number of samples	19 C/M/W	1 C/W	
Waterlogged Plant Remains continued...			
Weed/ Wild Plants continued...			
<i>Centaurea</i> spp.			thistle
<i>Lapsana communis</i> L.			nippewort
<i>Picris echioides</i> L.			bristly oxtongue
<i>Sonchus asper</i> (L.) Hill.			prickly sow-thistle
<i>Anthemis cotula</i> L.			stinking chamomile
cf. <i>Anthemis cotula</i> L.			possible stinking chamomile
<i>Chrysanthemum segetum</i> L.			corn marigold
<i>Bidens tripartita</i> L.			trifid bur-marigold
<i>Juncus</i> spp.			rush
cf. <i>Luzula</i> spp.			wood-rush
<i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link) Schult.			common/ slender spike-rush
<i>Bolboschoenus maritimus</i> (L.) Palla/ <i>Schoenoplectus</i> spp.			sea club-rush/ club rush
<i>Carex</i> spp. - 2-sided			sedge
<i>Carex</i> spp. - 3-sided			sedge
<i>Avena</i> spp. - floret base			wild/ cultivated oat
POACEAE - indet. small-sized caryopsis			small-seeded grass
POACEAE - indet. medium-sized caryopsis			medium-seeded grass
cf. POACEAE - indet. large-sized caryopsis			possible large-seeded grass
POACEAE - glume			wild grass glume
Unidentified			-
Unidentified - bud			-
Unidentified - leaf/ scale (unquantified fragments)			-
Unidentified - fruit/ seed head			-
Unidentified - stalk			-
Unidentified - tunic fragment (? <i>Allium</i> sp.)			-
Unidentified - twig with small leaves (<i>Thymus</i> -like leaves)			-
Total Identifications Charred Plant Remains	7035	21	
Total Identifications Mineralised Plant Remains	3088		
Total Identifications Waterlogged Plant Remains	2	400	
TOTAL	10125	421	

Key: cf. = compares favourably. ? = tentatively identified

Data Source: Southampton Castle (Upper Bugle Street) based on Green (1986).

Table 9: Comparison of High Medieval plant remains recovered from Southampton

Site	Southampton French Quarter	Quilter's Vault	Southampton 1953- 1969 (Cuckoo Ln & High St. B & C)	
Number of samples	10 C/M/ W	1 M	7 M/?W	
Phase	HMED	AN/ HMED	HMED	
Latin Binomial				English Common Name
Charred Plant Remains				
Cereal Grain				
<i>Avena</i> cf. <i>sativa</i> L.				possible cultivated oat
<i>Avena</i> spp./ <i>Secale cereale</i> L.				indeterminate oat/ rye
<i>Hordeum</i> sp. - hulled				hulled barley
<i>Secale cereale</i> L.				rye
<i>Secale cereale</i> L./ <i>Triticum</i> sp.				indeterminat rye/ wheat
<i>Triticum</i> sp. - free-threshing type				free-threshing wheat
<i>Triticum</i> sp. - indeterminate				indeterminate wheat
Cereal - indeterminate				indeterminate cereal
Cereal/ POACEAE - indeterminate				indeterminate cereal/ large grass
Embryo/ Coleoptile				
Cereal/ POACEAE - detached coleoptile				indeterminate cereal/ large grass
Cereal/ POACEAE - detached embryo				indeterminate cereal/ large grass
Cereal Chaff				
<i>Avena</i> cf. <i>sativa</i> L. - floret base				possible cultivated oat
<i>Hordeum</i> sp. - rachis node				indeterminate barley
<i>Hordeum</i> sp./ <i>Secale cereale</i> L. - indeterminate rachis node				barley/ rye
<i>Secale cereale</i> L. - rachis node				rye
<i>Triticum</i> sp. - indet. free-threshing rachis node				indeterminate free-threshing wheat
<i>Triticum</i> sp. - rachis node				indeterminate wheat
Cereal - indeterminate rachis node				indeterminate cereal
Cereal/ POACEAE - culm node				indeterminate cereal/ large grass
Cereal/ POACEAE - culm base				indeterminate cereal/ large grass
cf. Cereal/ POACEAE - culm base				possible indeterminate cereal/ large grass
Pulses				
<i>Vicia</i> spp./ <i>Pisum sativum</i> L.				vetch or garden pea
<i>Pisum sativum</i> L.				garden pea
Fruit/ Nut				
<i>Juglans regia</i> L.				walnut
<i>Corylus avellana</i> L. – nutshell				hazel
<i>Vitis vinifera</i> L.				grape
<i>Sambucus nigra</i> L.				elder
cf. <i>Sambucus nigra</i> L.				possible elder
Unidentified nutshell/ fruit stone				unidentified fruit/ nut

Table 9: Comparison of High Medieval plant remains recovered from Southampton continued...

Site	Southampton French Quarter	Quilter's Vault	Southampton 1953- 1969 (Cuckoo Ln & High St. B & C)	
Number of samples	10 C/M/ W	1 M	7 M/?W	
Phase	HMED	AN/ HMED	HMED	
Latin Binomial				English Common Name
Charred Plant Remains				
Other Economic Plants				
<i>Linum usitatissimum</i> L.				flax/ linseed
Weed/ Wild				
<i>Pteridium aquilinum</i> (L.) Kuhn - leaf				bracken
<i>Ranunculus acris</i> L/ <i>repens</i> L./ <i>bulbosus</i> L.				meadow/ creeping/ bulbous buttercup
<i>Ranunculus</i> subg. RANUNCULUS				buttercup
<i>Glaucium flavum</i> Crantz				yellow horned poppy
<i>Chenopodium</i> spp. (clearly charred)				goosefoot
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - internal structure				goosefoot/ orache
<i>Atriplex</i> spp.				orache
CHENOPODIACEAE/ CARYOPHYLLACEAE - indeterminate				Goosefoot Family/ Pinke Family
cf. <i>Moehringia trinervia</i> (L.) Clairv.				three-nerved sandwort
<i>Stellaria media</i> L. - agg.				chickweed
<i>Cerastium</i> spp.				mouse-ear
<i>Agrostemma githago</i> L.				corncockle
cf. <i>Agrostemma githago</i> L.				possible corncockle
cf. <i>Agrostemma githago</i> L. - calyx				possible corncockle
cf. <i>Agrostemma githago</i> L. - internal structure				possible corncockle
cf. <i>Silene</i> spp.				possible campion
CARYOPHYLLACEAE - unidentified				Pink Family
<i>Malva</i> spp.				mallow
cf. MALVACEAE - indet. Internal structure				possible Mallow Family
<i>Persicaria</i> spp.				knotweed
<i>Polygonum aviculare</i> L.				knotgrass
<i>Polygonum</i> spp./ <i>Rumex</i> spp./ <i>Carex</i> spp. - indet. internal structure				knotgrass/ dock/ sedge
<i>Rumex</i> spp.				dock
cf. <i>Lepidium</i> sp.				possible pepperwort
<i>Brassica</i> cf. <i>nigra</i> L.				possible black mustard

Table 9: Comparison of High Medieval plant remains recovered from Southampton continued...

Site	Southampton French Quarter	Quilter's Vault	n 1953-1969 (Cuckoo Ln & High St. B	
Number of samples	10 C/M/W	1 M	7 M/?W	
Phase	HMED	AN/HMED	HMED	
Latin Binomial				English Common Name
Charred Plant Remains				
Weed/ Wild continued...				
<i>Raphanus raphanistrum</i> L.				wild radish
<i>Raphanus raphanistrum</i> L. - capsule segment				wild radish
cf. <i>Raphanus raphanistrum</i> L. - capsule segment				possible wild radish
cf. <i>Anagallis arvensis</i> L.				possible scarlet pimpernel
<i>Vicia</i> spp./ <i>Lathyrus</i> spp.				vetch/ vetchling
cf. <i>Vicia</i> spp./ <i>Lathyrus</i> spp.				possible vetch/ vetchling
<i>Torilis japonica</i> (Houtt.) DC.				upright hedge-parsley
<i>Hyoscyamus niger</i> L.				henbane
<i>Galeopsis</i> spp.				hemp-nettle
<i>Plantago media</i> L./ <i>lanceolata</i> L.				hoary/ ribwort plantain
<i>Euphrasia</i> spp./ <i>Odontites vernus</i> (Bellardi) Dumort				eyebright/ red bartsia
<i>Galium</i> spp.				cleaver
<i>Centaurea</i> spp.				thistle
<i>Anthemis cotula</i> L.				stinking chamomile
<i>Anthemis cotula</i> L. - flower head with seed (seed quantified)				stinking chamomile
<i>Chrysanthemum segetum</i> L.				corn marigold
<i>Tripleurospermum inodorum</i> (L.) Sch. Bip.				scentless mayweed
ASTERACEAE - internal structure small-sized achene				Daisy Family
<i>Eleocharis palustris</i> (L.) Roem. & Schult./ <i>uniglumis</i> (Link) Schult.				common/ slender spike-rush
<i>Bolboschoenus maritimus</i> (L.) Palla/ <i>Schoenoplectus</i> spp.				sea club-rush/ club rush
<i>Carex</i> spp. - 2-sided				sedge
<i>Carex</i> spp. - 3-sided				sedge
CYPERACEAE - unidentified				Sedge Family
CYPERACEAE - indeterminate, long, bevel-shaped (?Cyperus)				Sedge Family
<i>Cynosurus cristatus</i> L.				crested dog's-tail
<i>Avena</i> spp.				wild/ cultivated oat
<i>Avena</i> spp. - germinated caryopsis				wild/ cultivated oat
<i>Avena</i> spp. - floret base				wild/ cultivated oat
<i>Avena</i> spp. - glume (unquantified)				wild/ cultivated oat
<i>Avena</i> spp. - rachilla				wild/ cultivated oat
cf. <i>Avena</i> spp.				possible wild/ cultivated oat
cf. <i>Avena</i> spp. - floret base				possible wild/ cultivated oat
cf. <i>Avena</i> spp. - germinated				possible wild/ cultivated oat
cf. <i>Avena</i> spp. - glume (unquantified)				possible wild/ cultivated oat
<i>Avena</i> spp./ <i>Bromus</i> spp.				wild or cultivated oat/ brome grass

Table 9: Comparison of High Medieval plant remains recovered from Southampton continued...

Site	Southampton French Quarter	Quilter's Vault	n 1953-1969 (Cuckoo Ln & High St. B	
Number of samples	10 C/M/W	1 M	7 M/?W	
Phase	HMED	AN/HMED	HMED	
Latin Binomial				English Common Name
Charred Plant Remains				
Weed/ Wild continued...				
<i>Avena</i> spp./ <i>Bromus</i> spp. - germinated				wild or cultivated oat/ brome grass
cf. <i>Avena</i> spp./ <i>Bromus</i> spp.				possible oat/ brome grass
<i>Bromus</i> spp.				brome grass
POACEAE - indet. small-sized caryopsis				small-seeded grass
POACEAE - indet. medium-sized caryopsis				medium-seeded grass
POACEAE - indet. large-sized caryopsis				large-seeded grass
POACEAE - indet. caryopses fragments (estimate of whole)				Grass Family
POACEAE - culm node				wild grass culm node
Unidentified				-
Unidentified - leaf (fragments)				-
Unidentified - fruit/ seed head				-
Unidentified - small flower (< 5 mm diameter)				-
Unidentified - medium-sized flower - ca. 5 - 10 mm diameter				-
Indeterminate - poorly preserved seed/ internal structures				-
Indeterminate - highly vitrified amorphous plant material				-
Mineralised Plant Remains				
Cereals				
Cereal - unidentified bran				cereal
Cereal/ POACEAE - indeterminate straw fragments (unquantified)				cereal/ large grass
Pulses				
<i>Pisum sativum</i> L. - intact hilum				garden pea
cf. FABACEAE - internal structure of pulse/ vetch				possible Pea Family

Table 9: Comparison of High Medieval plant remains recovered from Southampton continued...

Site	Southampton French Quarter	Quilter's Vault	n 1953-1969 (Cuckoo Ln & High St. B)	
Number of samples	10 C/M/W	1 M	7 M/?W	
Phase	HMED	AN/HMED	HMED	
Latin Binomial				English Common Name
Mineralised Plant Remains				
Fruit/ Nut				
<i>Ficus carica</i> L.				fig
<i>Juglans regia</i> L.				walnut
<i>Corylus avellana</i> L. - nutshell fragmnet				hazelnut
<i>Ribes</i> spp.				current
<i>Rubus</i> section Glandulosus Wimm. & Grab.				blackberry
<i>Rubus</i> section Rubus				blackberry/ raspberry
<i>Rubus idaeus</i> L.				raspberry
<i>Fragaria vesca</i> L.				strawberry
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - stones				plum/ bullace/ damson/ greengage
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel				sloe/ plum/ bullace/ damson/ greengage
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - indet. frags				sloe/ plum/ bullace/ damson/ greengage
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - rounded stone frags				sloe/ plum/ bullace/ damson/ greengage
<i>Prunus spinosa</i> L./ <i>domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel				sloe/ plum/ bullace/ damson/ greengage
<i>Prunus avium</i> (L.) L./ <i>cerasus</i> L				dwarf/ bird cherry
? <i>Cydonia oblonga</i> Mill.				tentative identification of quince
<i>Pyrus</i> sp./ <i>Malus</i> sp. - indeterminate				pear/ apple
<i>Vitis vinifera</i> L.				grape
cf. <i>Vitis vinifera</i> L.				possible grape
<i>Sambucus nigra</i> L.				elder
<i>Sambucus nigra</i> L. (part charred)				elder
cf. <i>Sambucus nigra</i> L.				possible elder
Other Economic Plants				
<i>Cuminum cyminum</i> L.				cumin
Tree/ Shrub				
<i>Betula</i> spp. - (wings of seed damaged - ?ancient)				birch
<i>Sorbus</i> spp.				rowan/ whitebeam
? <i>Crataegus monogyna</i> Jacq.				hawthorn

Table 9: Comparison of High Medieval plant remains recovered from Southampton continued...

Site	Southampton French Quarter	Quilter's Vault	Southampton 1953-1969 (Cuckoo Ln & High St. B. & C)	
Number of samples	10 C/M/ W	1 M	7 M/?W	
Phase	HMED	AN/ HMED	HMED	
Latin Binomial				English Common Name
Mineralised Plant Remains				
Weed/ Wild continued...				
<i>Pteridium aquilinum</i> (L.) Kuhn - leaf				
<i>Urtica dioica</i> L.				common nettle
<i>Urtica urens</i> L.				small nettle
<i>Chenopodium</i> sp.				goosefoot
<i>Chenopodium</i> spp./ <i>Atriplex</i> spp. - indet, internal structure				goosefoot/ orache
CHENOPODIACEAE/ CARYOPHYLLACEAE - indet.				Goosefoot Family/ Pink Family
<i>Agrostemma githago</i> L. - internal structure				corncockle
cf. <i>Agrostemma githago</i> L. - internal structure				possible corncockle
CARYOPHYLLACEAE - ? <i>Agrostemma githago</i> seed coat fragments				Pink Family
CARYOPHYLLACEAE – indet.				Pink Family
cf. MALVACEAE - internal structure, fragmented				possible Mallow Family
<i>Raphanus raphanistrum</i> L. - capsule segment				wild radish
cf. <i>Vicia hirsuta</i> L.				possible hairy tare
cf. FABACEAE - seed coat				possible Pea Family
<i>Epilobium</i> sp.				wilowherb
<i>Conium maculatum</i> L. (?dried-out waterlogged)				hemlock
APIACEAE - unidentified				Carrot Family
<i>Galeopsis tetrahit</i> L.				common hemp nettle
LAMIACEAE – unident				Mint Family
<i>Carduus</i> spp./ <i>Cirsium</i> spp.				thistle
<i>Centaurea</i> spp.				knapweed
<i>Leontodon</i> spp.				hawkbit
<i>Solidago</i> spp.				goldonrod
<i>Artemisia</i> spp.				mugwort
<i>Anthemis</i> spp. - type				chamomile
<i>Chrysanthemum</i> spp. - type				crown daisy
ASTERACEAE - internal structure, small-sized achene				Daisy Family
<i>Carex</i> spp. - 2-sided				sedge
<i>Carex</i> spp. - 3-sided				sedge
cf. <i>Avena</i> spp./ <i>Brormus</i> spp.				possible oat/ brome grass
POACEAE - small-sized caryopsis				small-seeded grass

Table 9: Comparison of High Medieval plant remains recovered from Southampton continued...

Site	Southampton French Quarter	Quilter's Vault	n 1953-1969 (Cuckoo Ln & High St. B	
Number of samples	10 C/M/ W	1 M	7 M/?W	
Phase	HMED	AN/ HMED	HMED	
Latin Binomial				English Common Name
Mineralised Plant Remains				
Weed/ Wild continued...				
Unidentified				-
Unidentified - moss				-
Unidentified - seed capsule, extremely thin, oval-shaped (?Isatis)				-
Indeterminate seed coat - ?fruit (e.g. plum/ cherry/ fig)				-
Indeterminate - poorly preserved seed/ internal structure				-
Indeterminate amorphous mineralised concretions				-
WATERLOGGED PLANT REMAINS				
Fruit/ Nut				
<i>Rubus</i> section <i>Rubus</i> (smaller than other <i>Rubus</i> seed, and more beaked)				blackberry/ raspberry
cf. <i>Prunus amygdalus</i> Batsch. - nutshell fragments (est whole nut)				Possible almond
<i>Prunus domestica</i> ssp. <i>insititia</i> (L.) Bonnier & Layens - kernel				Plum/ bullace/ damson / greengage
<i>Sambucus nigra</i> L.				Elder
Tree/ Shrub				
cf. <i>Cornus sanguinea</i> L.				Possible dogwood
Weed/ Wild				
<i>Papaver rhoeas</i> L./ <i>dubium</i> L.				common/ long-headed poppy
<i>Glaucium flavum</i> Crantz				yellow horned poppy
<i>Urtica dioica</i> L.				Common nettle
<i>Atriplex</i> spp.				Orache
CHENOPODIACEAE/ CARYOPHYLLACEAE - indeterminate				Goosefoot Family/ Pink Family
<i>Raphanus raphanistrum</i> L.				wild radish
<i>Mentha aquatica</i> L.				water mint
? <i>Orobanche</i> spp.				tentative identification of broomrape
<i>Lapsana communis</i> L.				nipplewort
<i>Juncus</i> spp.				rush
POACEAE - indet. small-sized caryopsis				small-seeded grass
Unidentified				
Total Identifications Charred Plant Remains	2340	0	UN	
Total Identifications Mineralised Plant Remains	1198	413	UN	
Total Identifications Waterlogged Plant Remains	167	0	UN	
TOTAL	3705	413	UN	

Key: UN = unquantified. cf. = compares favourably. ? = tentatively identified

Data sources: Quilter's Vault (QV3, F119): Green 1979. Southampton 1953-1969 (Cuckoo's Lane & High Street B & C): Dimpleby 1975. The Dimpleby report does not clearly specify whether preservation is by mineralisation or waterlogging; however, it does indicate that many of the samples clearly contain cassy (described as 'waxy') material. As a result, the data has been scored as mineralised