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**A Post-Roman Pottery Assemblage from Hills Flats, South
Gloucestershire: Trade and Communication by Water in the
Severn Estuary**

by J. R. L. Allen
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A Post-Roman Pottery Assemblage from Hills Flats, South Gloucestershire: Trade and Communication by Water in the Severn Estuary

By J.R.L. ALLEN

Introduction

Together with the streams emptying into them, the Severn river, Severn Estuary and Bristol Channel composed over the last few millennia one of the most important highways for exchange, trade and communication by water in the whole of Britain (e.g. Hussey 2000). The prominence in these activities of such ports as Gloucester (Ripley 1980; Herbert 1988), Chepstow (Waters 1977), Bristol (Sherborne 1971; Large 1984; Morgan 1993), Newport (Dawson 1932), Cardiff (Daunton 1977), Swansea (Williams 1940) and Bideford-Barnstaple (Goaman 1968; Grant 1983) during a greater or lesser part of the last millennium is well-attested by documentary studies and supported by archaeological work (e.g. Good 1987; Nicholson and Hillam 1987; Jones *et al.* 1987). Some record also exists especially of the more recent vessels, harbourworks and warehousing crucially involved (Boyle and Payne 1952; Farr 1954; Grant and Hughes 1975; Mote 1986; Howell 1987; Conway-Jones 1984; Green 1995, 1996, 1999, 2000; Collard 2000). Communication and trade at these centres, however, partly depended upon and fed into a complex and less evident web of similar activities at a host of minor landing places along the waterway (Hussey 2000). Many of these, serving a few farms or a village or two, have passed unsung and are only detectable archaeologically.

The object of this paper is to give a further account from archaeological evidence of the representative, minor landing place at Hills Flats on the left bank of the middle Severn Estuary, about mid-way between Gloucester and the mouths of the Wye and Avon. A pottery assemblage furnishes the new evidence for activity ranging over the whole of the last millennium, although the function of the site seems to have changed about half-way through this period.

Setting and Material

Hills Flats is a triangular outcrop of Triassic rocks overlain by Holocene estuarine sediments occurring in the intertidal zone at a comparatively level altitude a few metres above O.D. (Fig. 1A and B). Crossing the outcrop is the now-abandoned and silted-up lowermost channel (palaeochannel) of Hill Pill (or Clapham Pill), the higher parts of which continue to drain embanked marshes in the Berkeley Vale Level to the south-east.

Allen and Fulford (1996) showed that the marsh edge, while continuing to build up as sea level rose, experienced a net south-eastward retreat of at least 500 m as the result of post-Roman erosion. In the process, the palaeochannel became exposed at a low stratigraphic level on the shore, so that in recent years it has yielded a tumbled mass of stone blocks thought to have been erected as a quay, three stratified medieval pottery sherds, a stratified probable fish trap of woven wood with a conventional radiocarbon age of 640+/-50 yrs BP (cal A.D.1280–1410 at 2 σ ; Beta-61770),

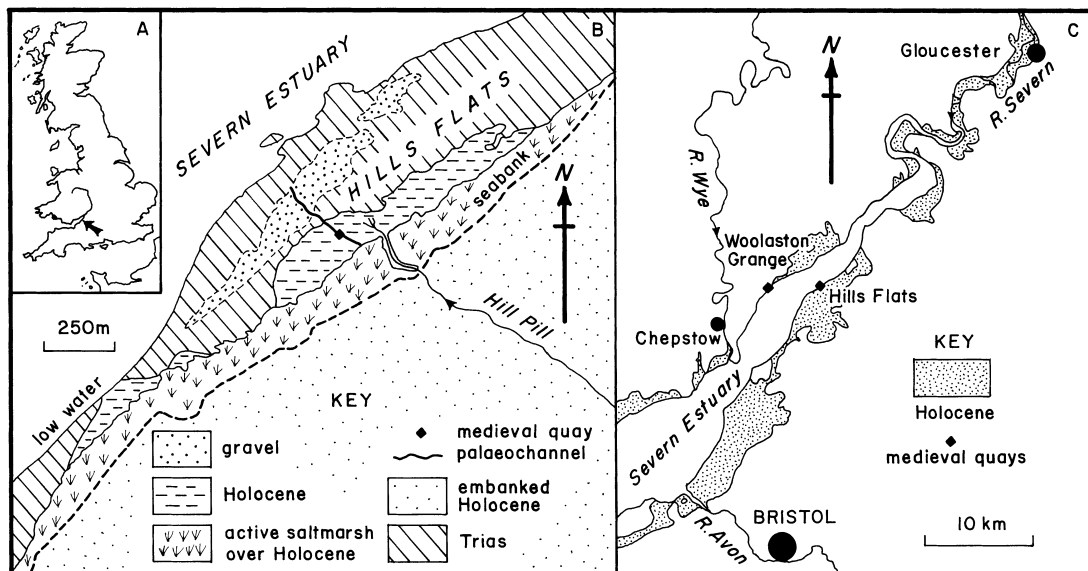


Fig. 1. Hills Flats and its context. A: general setting. B: outline geology of the Hills Flats area. C: the Severn Estuary from Gloucester to the Wye and Avon, showing medieval quays identified archaeologically (including Bristol).

and a fishing basket (probably for eels) of woven withies. Also in the process, a Romano-British settlement toward the north-eastern end of Hills Flats (Copeland 1981; Allen and Fulford 1987; Allen 1997) experienced partial erosion. In the same way as other sites on the margins of the Severn Estuary Levels (Allen and Fulford 1992; Allen 1998, 1999), this source afforded large amounts of Romano-British pottery which, with other occupation debris, became dispersed, especially in the ebb-tide direction, over much of Hills Flats. Some of these sherds, together with a little medieval and post-medieval pottery, occur stratified in gravel lenses in the vicinity of the palaeochannel and sharply overlying its fill (Allen and Fulford 1996). Other archaeological sites on the margins of the Levels show similar evidence of the re-deposition of transposed archaeological materials.

Little attention was paid to these post-Roman sherds, which appeared to be merely stray finds, but further systematic collecting in the intertidal zone has shown that ceramics of this period are actually present at Hills Flats in significant amounts, in contrast to the situation at the otherwise similar locality of Oldbury Flats a little downstream (see below). Their distribution is closely confined to round about the mouth of Hill Pill (O.S. Nat. Grid ST 626973) and seems more restricted than that of the Romano-British material. The assemblage—277 items (Tables 1–3)—provides the main evidence for a further evaluation of Hills Flats and Pill as a landing place. Weathering and current action have inflicted some damage on most sherds. In many cases glazes have become crazed and dulled and, in some instances, along with surface washes, lost entirely. That the assemblage, although of damaged sherds, is indigenous to Hills Flats is suggested by the survival of pairs of joining fragments from several fabrics, with the members of each pair showing different degrees of wear, pointing to different histories of burial and movement on the foreshore. Attributions have been made chiefly by reference to the Gloucester (Vince, in Heighway 1983) and Chepstow (Vince, in Shoesmith 1991) fabric series.

Medieval Period (Post-Conquest) (Table 1)

This pottery — chiefly body sherds and two small rim fragments from cooking pots, a few body sherds and two settings of stabbed handles from jugs/pitchers — makes up about one sixth of the total post-Roman collection. At least 14 wares are represented, several by just one or two sherds, and all but four could be confidently provenanced. A single ware of the late 13th to 15th century occurs in a high proportion, but there is an almost equal total percentage of sherds of earlier medieval wares, including three manufactured in either the Gloucester area or Malvern Chase from the 11th century.

During the acquisition of the systematic collection, a fourth stratified sherd was recovered from the fill of the palaeochannel, within the scatter of the findspots of the previously reported sherds (Allen and Fulford 1996). This substantial sherd is from the base of a sagging-bottom cooking pot (Fig. 2, no. 1) in Gloucester Early Medieval Ware of the 11th to 13th century. The stratified pottery reported earlier — a Bristol jug and two joining fragments from a sagging-bottom cooking pot manufactured on petrographic grounds in the Forest of Dean — has a slightly later but substantially overlapping age-range. All of the ranges are compatible with the age of the radiocarbon-dated fish trap stratified in the palaeochannel.

Early Modern Period (Table 2)

Ceramics of this period dominate the assemblage and occur in much the same diversity as the medieval wares. With the sole exception of an ointment jar, they range in date up to, but not later than, the middle of the 18th century.

Malvern Pink Ware, perhaps the earliest of the early modern pottery at Hill Pill, was made at Hanley Castle near the Severn (Hurst 1994) from the later 16th century until Malvern Chase was inclosed in 1633 (Vince, in Heighway 1983). The ware takes many forms and is widely distributed in the Severn Vale and neighbouring regions (Barton 1968–9; Vince 1977a; Vince, in Bond and Hunt 1977, Heighway 1983, Shoemith 1985, 1991; Morris 1980). The few sherds from Hill Pill include a jug/pitcher (Fig. 2, no. 2).

The Stroat Ware kilns apparently lay close to the right bank of the Severn Estuary and near the coast road not far upstream from Chepstow (Hart 1967; Blake 1994). A common ware at Hill Pill, the recognisable forms are chiefly pancheons (some spouted) and deep basins, but there are also chamber pots, pipkins and a white-slipped plate with crude sgraffito (Fig. 2, nos. 3–8). The ware may have a wide distribution in the Severn Estuary area, having been recognised at Gloucester (Vince, in Heighway 1983), Chepstow (Vince, in Shoemith 1991), and Magor Pill (Allen 1999). Production was from late in the 16th century until certainly late in the 17th century.

South Somerset Wares (Allan 1984; Coleman-Smith and Pearson 1988) occur in small quantities at Gloucester (Vince, in Heighway 1983) and also at Hill Pill. The forms represented are pancheons and small-medium bowls (Fig. 2, nos. 9 and 10).

Manufactured at kilns in the Barnstaple-Bideford area (Grant 1983), chiefly in the late 17th and early 18th centuries, North Devon Wares (Evans 1979; Grant 1983; Allan 1984) occur at many places accessible from the Bristol Channel and Severn Estuary (Allen 1999). At Hill Pill there is only one sherd in the coarse, heavily gravel-tempered fabric used for large basins and pancheons. Most of the remainder are in the lighter-tempered fabric used for jars/crocks, jugs and pipkins, and there are a few in which gravel temper is either rare or lacking (Fig. 2, nos. 11 and 12).

Sherds attributable to Newent Glasshouse Ware are common at Hill Pill and include a range of conical bowls but apparently no tablewares (Fig. 2, nos. 13 and 14). This manufactory, to the

Table 1. Medieval pottery.

Ware	Sherd no. (per cent)	Sherd wt. (gm) (per cent)
Palaeochannel (stratified)		
Gloucester Early Medieval Ware (Glouc. TF 41B), 11th–13th century	1	329.1
Unstratified (provenanced)		
Sand-and-limestone Tempered Ware (Glouc. TF 43), 11th–12th century	5(11.1)	98.8(13.9)
Gloucester Early Medieval Ware (Glouc. TF 41B), 11th–13th century	3(6.7)	55.0(7.8)
Malvern Chase Ware (Glouc. TF 40), 11–13th century	1(2.2)	9.2(1.3)
Bath 'Fabric A' Ware (Glouc. TF 48), late 11th–early 13th century	2(4.4)	44.9(6.3)
Chepstow Fabric Ha, 11th–13th century	1(2.2)	18.6(2.6)
Minety-type Ware (Glouc. TF 44, Chepstow Fabric La), 12th–15th century	4(8.9)	57.4(8.1)
Ham Green Ware (jugs) (Glouc. TF 53), early–mid 13th century	3(6.7)	47.8(6.7)
Surrey Whitewares (?Coarse Border Ware), 14th–mid 15th century	1(2.2)	5.6(0.8)
Bristol Wares (Chepstow Fabric Jb), late 13th–15th century	19(42.2)	283.4(40.0)
Unstratified (unprovenanced)		
A. Bright red, hard, abundant rounded quartz (≤ 0.5 mm) set in slightly micaceous matrix	1(2.2)	11.3(1.6)
B. Pinkish cream, hard, abundant inclusions (≤ 4 mm) of brown, micaceous siltstone, grey-brown quartzitic sandstone and subangular quartz with burnt-out organic matter	1(2.2)	22.5(3.2)
C. Pale grey with orange exteriors, hard, abundant inclusions (≤ 2 mm) of limestone, dark brown micaceous siltstone, red ore, and occasional clay relicts and quartz sand (≤ 0.5 mm)	1(2.2)	30.7(4.3)
D. Pale grey with orange exteriors, soft, very abundant relicts of variegated clay (≤ 3 mm) with rare red ore and rounded quartz sand	3(6.7)	24.1(3.4)
Totals	45(99.9)	709.3(100.0)

Table 2. Early modern pottery.

Ware	Sherd no. (per cent)	Sherd wt. (gm) (per cent)
Malvern Chase Pink Ware, late 16th–early 17th century	7(4.6)	213.5(4.5)
Stroat Ware, late 16th–late 17th century	24(15.8)	1,077.9(22.5)
South Somerset Wares, 17th–18th century	13(8.6)	267.4(5.6)
North Devon Wares, late 17th–early 18th century	14(9.2)	236.6(4.9)
Ashton Keynes Ware, 16th–18th century	7(4.6)	293.2(6.1)
Cistercian Wares, 17th–18th century	2(1.3)	57.1(1.2)
Newent Glasshouse Ware, 17th–mid 18th century	22(14.5)	919.4(19.2)
Post-medieval Welsh Borderland Wares	37(24.3)	731.8(15.3)
Staffordshire Black-glazed Drinking Vessels, late 17th century	3(2.0)	18.4(0.4)
Staffordshire Black-glazed Kitchen Wares, late 18th century	5(3.3)	802.3(16.7)
(?)Staffordshire Ointment Jar <i>c.</i> 1780	1(0.7)	7.7(0.2)
Bristol/Staffordshire Wares		
slip-decorated cup, late 17th century	1(0.7)	5.0(0.1)
iron-glazed cup/tankard, 18th century	1(0.7)	2.1(0.1)
slip-decorated bowl, 18th century	1(0.7)	5.8(0.1)
slip-decorated, pressed plates, early–mid 18th century	11(7.2)	98.1(2.0)
Metropolitan Ware, mid–late 17th century	1(0.7)	35.5(0.7)
English Stonewares	2(1.3)	20.7(0.4)
Totals	152(100.2)	4,792.5(100.0)
Stroat Roof Tile	2	96.7
Clay Tobacco Pipes	13	114.9

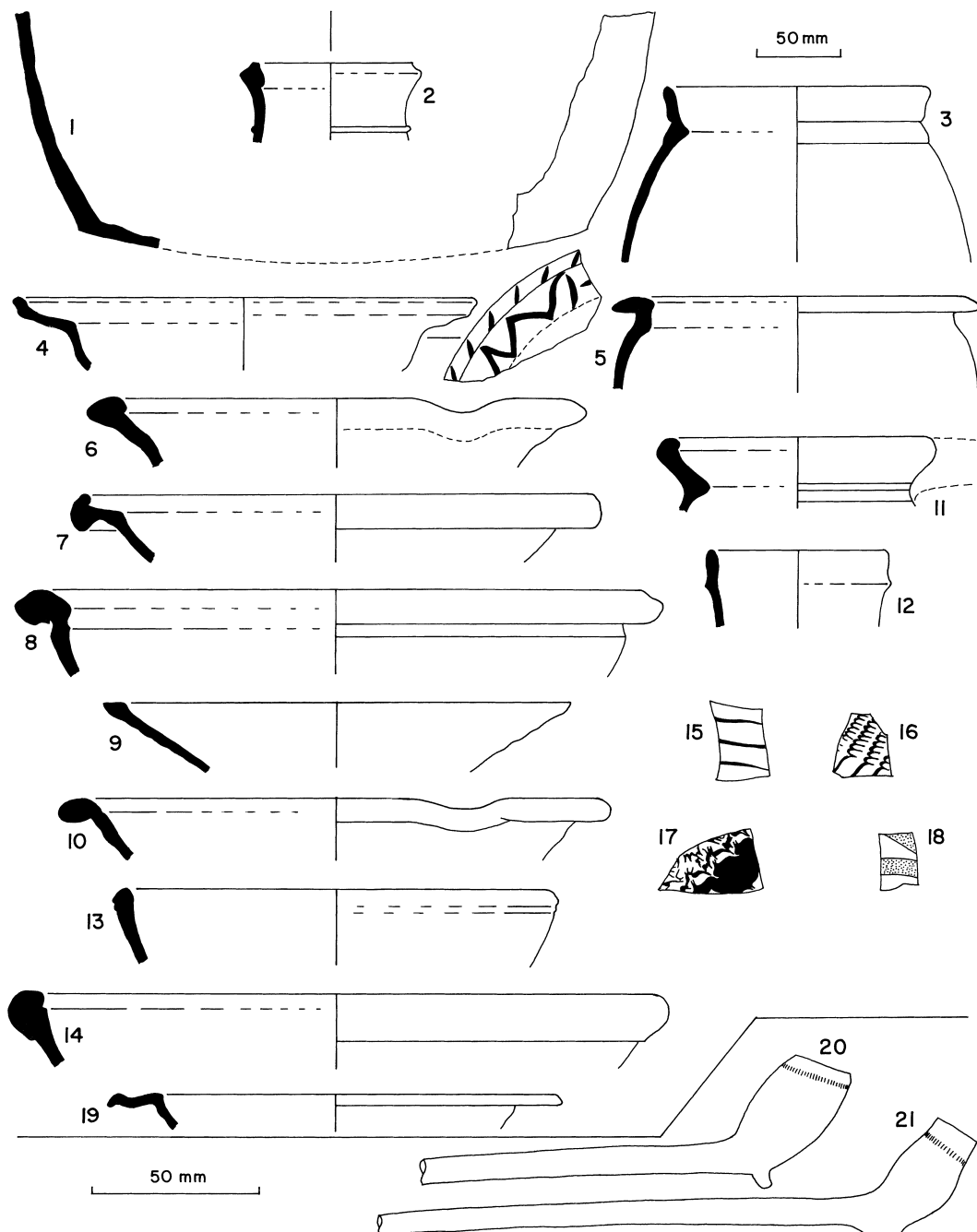


Fig. 2. Ceramics from Hills Flats. 1: Gloucester Early Medieval Ware; 2: Malvern Chase Pink Ware; 3–8: Stroat Ware; 9–10: South Somerset Wares; 11–12: North Devon Wares; 13–14: Newent Glasshouse Ware; 15–18: Bristol/Staffordshire Wares; 19: Metropolitan Ware; 20–21: tobacco pipes.

west of Gloucester, functioned from late in the 17th century until about the middle of the 18th (Vince 1977b). The more plentiful Post-medieval Welsh Borderland Wares include sherds from deep bowls and pancheons of medium and large size, as well as a handle-setting from a large jug/pitcher.

A wide variety of Staffordshire and Bristol/Staffordshire products occur at Hill Pill, amounting in total to about one sixth of the early modern pottery vessels. They date chiefly from the earlier 18th century, with the exception of the slip-decorated cup and black-glazed drinking vessels, which could represent the later 17th century. Especially diverse are fragments from slip-combed (Fig. 2, nos. 15–17) and slip-painted (Fig. 2, no. 18) pressed plates, illustrating many of the motifs recorded among well-dated, early–mid 18th-century groups (e.g. Mayes 1972; Vince, in Heighway 1983; Allan 1984). The late 18th century is represented by a creamware ointment jar, kindly identified by David Barker (The Potteries Museum and Art Gallery, Stoke-on-Trent).

An unusual find, paralleled at Magor Pill (Allen 1999) and possibly Bristol (R. Burchill pers. comm. 1999), is part of a Metropolitan Ware plate (Fig. 2, no. 19), originating in the Thames Estuary area (Newton and Bibbings 1960; Cooper 1968; Brears 1971; Nenck 1999). Glaze is preserved only along the extreme edge of the rim, and sgraffito work is not evident, but a slip-trailed decoration could have been present.

There are two fragments of roof tile in typical Stroait Ware fabric. One shows clear traces of a cut crest and the other had some kind of raised decoration.

The clay tobacco pipes include four whole to fragmentary bowls with broken stems, although none is stamped. Two of these have a flat heel and one is complete (Fig. 2, no. 21), closely resembling Peacey's (1979) type 3a dating to the mid–late 17th century. The other flat-heeled fragment is also likely to be of that century. Short spurs appear on the remaining bowls. The more complete of these (Fig. 2, no. 20) is like Peacey's (1979) types 9 and 10, assigned to the late 17th or early 18th century. An 18th- or 19th-century date seems likely for the other spurred fragment.

Modern Period (Table 3)

About one quarter of the total assemblage is attributable to the 19th and earlier 20th centuries. The forms are diverse but lack such distinctive features as decipherable manufacturer's or vendor's marks.

Table 3. Modern (19th–20th century) pottery.

Ware	Sherd no. (per cent)	Sherd wt. (gm) (per cent)
White earthenwares, transfer-printed in pale blue	13(16.3)	243.5(8.3)
White earthenwares, transfer-printed in dark blue	23(28.8)	652.5(22.2)
Miscellaneous white earthenwares	15(18.8)	811.7(27.6)
Stonewares	29(36.3)	1,234.9(42.0)
Totals	80(100.2)	2,942.6(100.1)

There is a small number of sherds from plates, serving dishes and chamber pots in white earthenware decorated with pale blue, underglaze, transfer-printed flower or chinese-style patterns. Present in larger numbers is a similar range of white earthenwares with similar kinds of underglaze decoration in dark blue. The miscellaneous white earthenwares — cups, plates, serving dishes, bowls, chamber pots and a vase — are chiefly plain, but there are a few bichrome items and a fluted dish/bowl carrying an overglaze, transfer-printed, polychrome flower pattern. Various stonewares and semi-stonewares are present as bottles, flagons, salt jars, preserve jars and polychrome tea-pots.

Oldbury Flats (Table 4)

Similar in many respects to that of Hills Flats is the archaeological site at Oldbury Flats 5 km downstream, where coastal erosion has partly removed another, probably more substantial Romano-British settlement created on embanked alluvium (Green and Solley 1980; Allen and Fulford 1987, 1992; Allen and Rippon 1998). Similarly large collections of unstratified, Romano-British pottery have been made at the two localities, but the amount of post-Roman ceramics at Oldbury Flats is only about one tenth of that described above, and no definite medieval wares are known.

In composition and date-range —from the late 16th to the 19th and into the 20th century — this small assemblage resembles the post-medieval groups from Hills Flats.

Table 4. Pottery from Oldbury Flats.

	No. of sherds
Malvern Chase Pink Ware	1
North Devon Wares	2
Frechen Stoneware	1
Ashton Keynes Ware	3
Newent Glasshouse Ware	4
Bristol/Staffordshire Wares	3
Porcelain (underglaze-painted cup)	1
Miscellaneous white earthenwares	6
Miscellaneous stonewares	2
Clay tobacco-pipes (one glaze-splashed)	2
Total	25

Discussion and Conclusions

It is not surprising, given the intermediate location of Hills Flats in the Severn Estuary (Fig. 1C), that the medieval assemblage from there (Table 1) should closely resemble pottery groups recorded from such major centres as Gloucester (Vince, in Heighway 1983), Chepstow (Vince, in Shoemith 1991) and Bristol (Price and Ponsford 1998). Both the unstratified wares, as well as the stratified sherds from the palaeochannel, point to a fairly steady activity at Hills Flats from the

11th to the 14th or 15th centuries. Wares local to Gloucester, or manufactured upstream, as well as those produced in or near Bristol or marketed from there, all found their way to the locality as part of a regional network of medieval distribution (e.g. Vince 1977a; Papazian and Campbell 1992). The waterway furnished by the Severn river and the Severn Estuary, together with the navigable streams that drained into them, was crucial to this dispersal.

During this medieval phase the marsh edge stood much further out in the Severn Estuary and in Hill Pill there was a rough stone quay at which boats could berth (Allen and Fulford 1996). These could have served contemporaneous settlements on the embanked alluvium nearby, some of which have been identified from pottery scatters (Allen 1997). The fishing activities recorded at the pill may have helped to sustain these communities. Stratified along with the pottery in the palaeochannel are substantial quantities of coal and iron ore (goethite). As these lumps appear to be in an as-mined condition, they probably represent spillages from cargoes brought across the estuary from the Forest of Dean, where both ore and coal occur widely at no great distance from the estuary (Trotter 1942). The ore could have been exported (Allen 1996) from the medieval stone-and-timber quay at Woolaston Grange (Fulford *et al.* 1992), on the opposite bank just 3 km away (Fig. 1C), or from a landing place such as Wose Pill near Lydney (Herbert 1996a, 1996b). Construction of the Woolaston quay began in the mid 12th century and a seaward extension was added early in the next century. At some time between the early 15th and early 16th century there was a landward addition to the quay, perhaps in response to damage or loss at the seaward end.

Whereas the dispersed medieval pottery from Hills Flats arguably came from an accumulation focused on the quay in the palaeochannel, there is nothing to link the early modern and modern groups with this particular landing place. The demise of the quay had occurred before 1659, for by then the marsh-edge ran inland of its present line (Gloucestershire Record Office, D 908). Erosion may actually have overtaken the quay rather earlier, perhaps roughly when the Woolaston landing fell out of use on account of this factor (Fulford *et al.* 1992), as the dated fish trap would allow, for the post-medieval pottery is not older than the late 16th century (Table 2).

The post-medieval wares at Hills Flats (Tables 2 and 3) have a strongly domestic character and represent products extensively traded along the Severn river, Severn Estuary and Bristol Channel (e.g. Vince, in Heighway 1983; Campbell, 1993; Allen 1999; Ireland, in Heighway and Bryant 1999). If there was post-medieval trading, however, it seems likely that the vessels involved were merely berthed on the open shore, as no landing facilities other than the medieval quay are known. A stronger possibility is that the pottery was discarded from vessels in passage down the Severn Estuary, having been in daily use on board. Whereas sailing vessels could reach Gloucester from Bristol in a single tide, the return journey required stops forced by the falling of the tide (Rowbotham 1983, 89–91), boats either anchoring in pools or taking ground on level areas of shore, such as Hills Flats presents (the opening in 1827 of the Gloucester–Berkeley Canal did not entirely remove this necessity). Others may have berthed there on convenient tides in order to avoid navigating the estuary at night or in bad weather. The pottery is least likely to have originated as household rubbish dumped into the estuary, as the nearest known coastal habitations are respectively 1.5 and 2.0 km distant from Hill Pill. On the issue of trading, no landing place is mentioned by Jenner-Fust (1931) in his account of Hill manor during the 17th and 18th centuries. There was reported to be no trading at the pill in the 1790s, when landing places in the estuary generally were surveyed (Gloucester Library, Gloucestershire Collection, Box 8.57). Occasional visits to Hills Flats, however, perhaps for the purpose of supplying farmers or taking on produce, are not thereby discounted. In contrast, trading was recorded on the opposite bank at Horse Pill (O.S. Nat. Grid ST 580972), where there is a ceramic record from the 17th and 18th centuries (Allen 1999), while at Grange Pill (ST 592981), yielding the remains of a boat of caravel construction (Townley 1998), two sloops trading to Chepstow and Bristol were noted.

Although the pottery record points to activity at Hills Flats stretching over about a millennium, the evidence suggests a significant change of principal function roughly half-way through the period. In early modern and modern times the locality may have served mainly as a convenient staging point chiefly for outward-bound vessels, in contrast to the trading at a quay in a sheltered pill — one of almost certainly many in the estuary — witnessed during the medieval period. It is perhaps not without significance that the apparent change in function coincides in time with an important episode of coastal erosion which widely affected both banks of the Severn Estuary.

Acknowledgements

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