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**Moated Enclosures on the North Avon Level: survey and
excavation at Rockingham Farm, Avonmouth, 1993-7**

by M. Locock and M. Lawler
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Moated Enclosures on the North Avon Level: survey and excavation at Rockingham Farm, Avonmouth, 1993–7

By MARTIN LOCOCK and MARTIN LAWLER

With contributions by Paul Courtney, Gill Evans, Glenys Lloyd-Morgan and Steve Sell

Introduction

Rockingham Farm comprises an area of *c.* 24 hectares (60 acres) near the coastline of the Avonmouth Level, north of the Avonmouth industrial complex (Fig. 1). Rockingham Farm lies on the south bank of the Salt Rhine, just east of the A403 Avonmouth — Aust road, on the Level, an area of flat alluviated land drained by a system of ditches known as rhines and pills; higher ground lies 3 km to the south-east. Extensive earthworks relating to earlier use of the area (plough ridges, enclosures and occupation sites) had been recorded by air photography in 1946 (RAF CPE UK 1869 3014–5: prints held by Avon (now Bristol) S.M.R.; Fig. 2), but had since been degraded by ploughing. The development site straddles Lawrence Weston Road, which runs south-east, broadly parallel to the Salt Rhine, until it reaches the solid geology.

In 1993 Western Properties Ltd. and AMEC Developments Ltd. submitted a planning application to develop the site. The Glamorgan-Gwent Archaeological Trust (GGAT) undertook a desk-based assessment which identified a number of sites within the area (Fig. 3; see Table 1). In 1994 fieldwork commenced with the survey of the standing structures at Rockingham Farm (Site 1), recording of earthworks (Sites 2–5), and evaluation of Sites 2 and 4. Further survey of Site 2, and a watching brief on rhine cutting at the north end of Site 2, took place in 1995. In 1997 the site was purchased by Burford Western Estates Ltd. and a revised planning application was submitted for a vehicle storage park; the site boundary was extended to the east and north. Further archaeological work followed, comprising the investigation of Site 2, survey of Site 6, and evaluation north of the Salt Rhine.

Construction of the storage park has raised the ground level by *c.* 1 m, burying the previous ground surface. Of the identified sites, only the buildings of Rockingham Farm (which were levelled) and part of a buried soil horizon (layer 729) were substantially affected, although the earthwork sites have been stripped of topsoil. The project was entirely funded by the developers (Severngate Ltd. and Burford Western Estates Ltd.). The documentary archive, together with all finds from the excavations, will be deposited with the City of Bristol Museums and Art Gallery (accession no. 4/1994).

Sea level rise since the end of the last glaciation has led to the to the deposition of alluvial silts to depths in excess of 10 m, the ‘Wentlooge Formation’ (Allen and Fulford 1986), creating the Levels filling the large glacial trough of the Severn valley. The alluvial silts contain peat bands, of which five have been recognised over large extents of the Levels (Bell and Neumann 1997). In the later sequence, peat growth seems to have been localised (Insole 1996, 99). Flooding of some parts of the Levels continued into the post-medieval period.

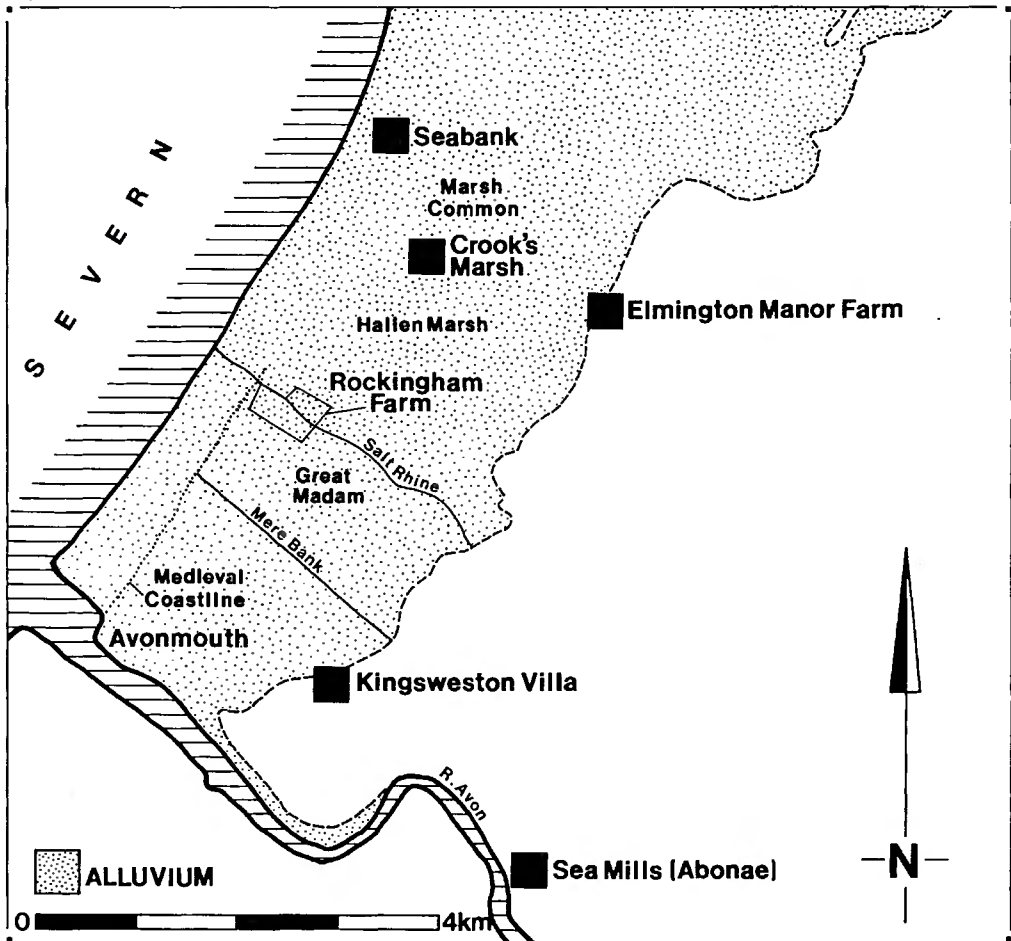


Fig. 1. Rockingham Farm and the Avonmouth Level.

The geology of the development site is well understood. Boreholes and trial pits across the site have established the depth of bedrock and the sequence of alluvial clays. At a consistent depth of 18 m, the head of the mudstone was found, overlain by a shallow layer of gravel. Most of the remainder of the sequence was clay and peat, although occasional sand was noted. The uppermost peaty clay, when plotted across the whole area, reveals that at this stage (perhaps 4000—2000 B.C.) the proto-Salt Rhine channel formed a broad sloping valley, with a deeper inlet at the west end of the site.

FIELDWORK

Site 2

Site 2 is a rectangular ditched enclosure on the south bank of the Salt Rhine (Fig. 4). In the post-medieval period, it was used as an orchard; the outer boundary of the enclosure is a hedged

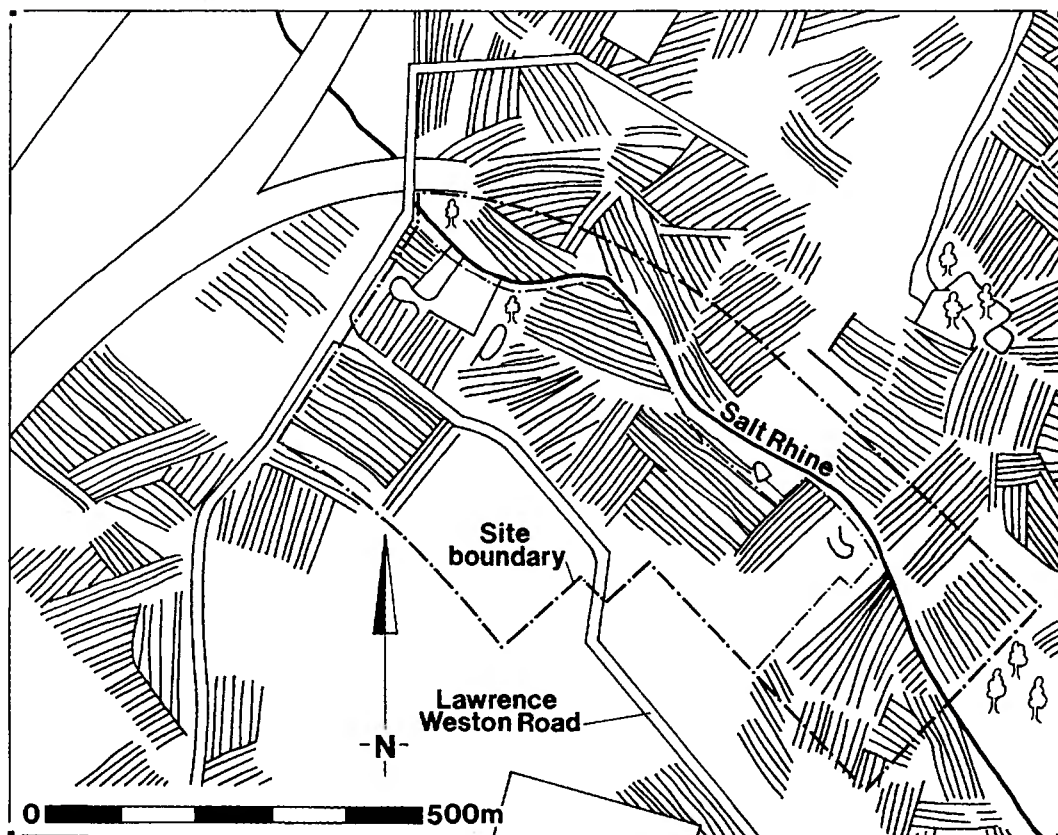


Fig. 2. Ridge-and-furrow earthworks, plotted from 1946 aerial photographs (RAF CPE UK 1869 3014-15).

ditch. Within this ditch is an inner enclosure with relict ditches and platforms, largely abandoned in the orchard phase. Small enclosures or annexes lie to the east and the south.

The site is 115 m in length and 40-45 m in width; it widens sharply to 50 m at the northern end. The enclosing ditch is *c.* 3-4 m in width and up to 1 m in depth. The banks vary in steepness, and are particularly sharply defined along the property boundary on the west. The ditch, which still serves as an active drainage course, is partly hedged with thorn and coppiced hazel.

The enclosure contains two main platforms. The South Platform rises to a height of 6.7 m above O.D., 0.4 m above the surrounding fields. It is defined by a substantial ditch, 6 m in width and 0.8 m in depth, on its south, east and west sides. To the north, the South Platform merges with the broader, asymmetrical North Platform, which occupies most of the wider north end of the enclosure. This platform rises to 7.3 m above O.D. on the north-west and falls to 6.3 m above O.D. to the south-east.

In the field to the east is a smaller sub-rectangular earthwork enclosure, 20 × 18 m. The north side of this smaller enclosure (East Annex) is defined by the Salt Rhine; its south and east sides are visible as an indistinct curving bank less than 0.3 m in height and *c.* 8 m in width. Although that area was not excavated, rubble was observed eroding from the east side of the ditch and it

is possible that the bank may have a stone core. A small enclosure (South Annex) to the south of the main ditch was defined by a ditch and contained no visible features.

It is known that a small farmstead located at the north end of the North Platform had been abandoned by the early 19th century. Selective excavation was undertaken, mainly by machine trenching (Fig. 4):

North Platform: An initial machine trench (Trench 2), 25 × 1.9 m, was dug E–W across the platform to a depth of 0.75 m. To the south of Trench 2, an open area measuring 20 × 35 m (Trench 3) was stripped by machine and excavated further by hand; two machine trenches were excavated at the south end of the platform (Trenches 4 and 5). A metal detector scan of the exposed surfaces was carried out. A watching brief on rhine cutting at the north end of the site was undertaken in 1995. In 1997 the southern half of the platform was exposed and excavated (Trench 13), an 'L'-shaped area 60 × 60 m at its maximum size. Samples from medieval contexts were recovered for macrofossil analysis.

South Platform: The platform was investigated by Trench 6.

South Annex: This was evaluated by Trench 14.

Ditches: A trench was excavated to a depth of 3 m within the south ditch of the enclosure to record the sedimentary profile at this location (Trench 12). Other trenches (Trenches 15–18 and 25) were excavated to record the ditch profiles and fills; samples were recovered for palaeo-environmental analysis and radiocarbon dating.

Phase 1 (Prehistoric)

In Trench 25, in the south-east part of Site 2 (Fig. 4), the machine trench revealed a lower blue-grey clay deposit with iron mottling (609) (Fig. 5), presumably alluvial silts of the Upper Wentlooge Formation. This was overlain by a band, 0.08 m deep, of a pale blue-grey clay without mottling, containing a lens of organic material (610); the colour of the clay was interpreted as the result of gleying (loss and alteration of the iron component as a result of water-logging). A similar sequence was found to the south-west of Site 2 (area shaded on Fig. 2), where the gleyed layer with organic lenses was noted at 5.2 m above O.D. (729); organic lenses appeared at both the upper and lower surface of the layer. In Trench 25 the layer dips sharply to the west, presumably as a result of post-depositional compression (626).

Samples were taken from monoliths *150 and *151 (Fig. 5) to provide evidence for the environment and depositional context (Walker *et al.* 1998). Diatoms were absent, and the few foraminifera tests were mainly from intertidal species. The pollen sequence suggests a series of episodes of saltmarsh and more terrestrial conditions. Radiocarbon samples from the two organic horizons in Trench 27 (the upper of which presumably correlates with layer 610 in Trench 25) were submitted to Beta Analytic, Florida, U.S.A., for accelerator mass spectroscopy dating. The lower horizon (Beta 118378) yielded a measured radiocarbon age of 3060 ± 70 BP ($\delta^{13}\text{C}$ -25.8‰: conventional C14 age 3040 ± 70 BP), calibrated to 1401–1131 cal BC (two sigma); the upper horizon (Beta 118379) gave a measured radiocarbon age of 2830 ± 70 BP ($\delta^{13}\text{C}$ -26.0‰: conventional C14 age 2810 ± 70 BP), calibrated to 1131–813 cal BC (two sigma) (calibration using CALIB 3.0). Thus the two organic horizons seem to reflect stabilised saltmarsh surfaces at a 300-year interval. The interpretation of these deposits is discussed at greater length elsewhere (Locock 1999).

Phase 2 (?Roman)

The ground surface beneath the North Platform was a yellow-brown clay. In the north-west arm of Trench 13, a small linear gully was found (532), 0.3 m wide (Fig. 4); it ran N–S, and was filled by yellow-brown clay containing daub and bone fragments. This feature lay below the

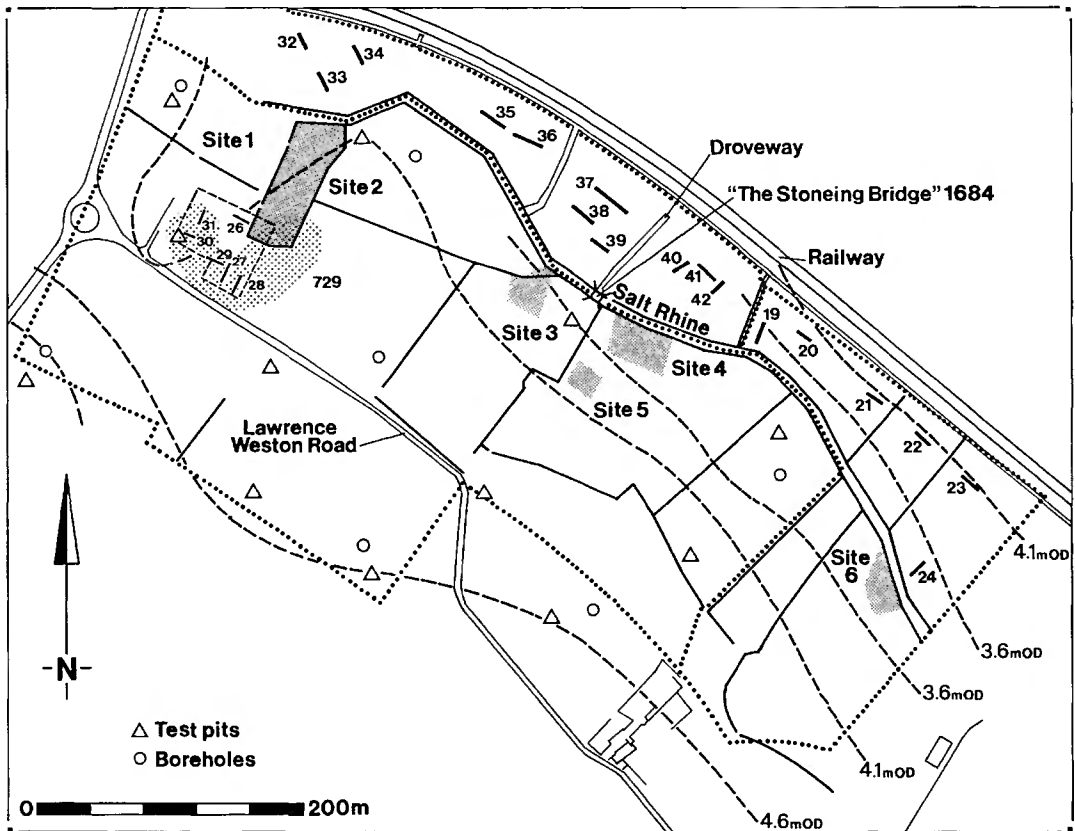


Fig. 3. Rockingham Farm development, showing Sites 1-6 and buried topography. Contours show upper peaty clay horizon. Also shown is extent of buried soil surface 729.

Table 1. Archaeological sites in the development.

site	Avon S.M.R. no.	O.S. Nat. Grid	description and date
1	9233	ST 52738091	Rockingham Farm (Post-medieval — modern farmstead)
2	5215	ST 52808085	Moated site ("Rockingham Farm II") (Medieval — post-medieval farmstead)
3	5216	ST 53178066	Earthworks (Cold Harbour field, site I) (Post-medieval farmstead?)
4	5217	ST 53278058	Earthworks (Cold Harbour field, site II) (Post-medieval farmstead?)
5	—	ST 53158051	Earthworks (Cold Harbour field, site III) (Undated, possible farmstead)
6	5218	ST 53368042	Earthworks (Old House Ground field) (Post-medieval farmstead)

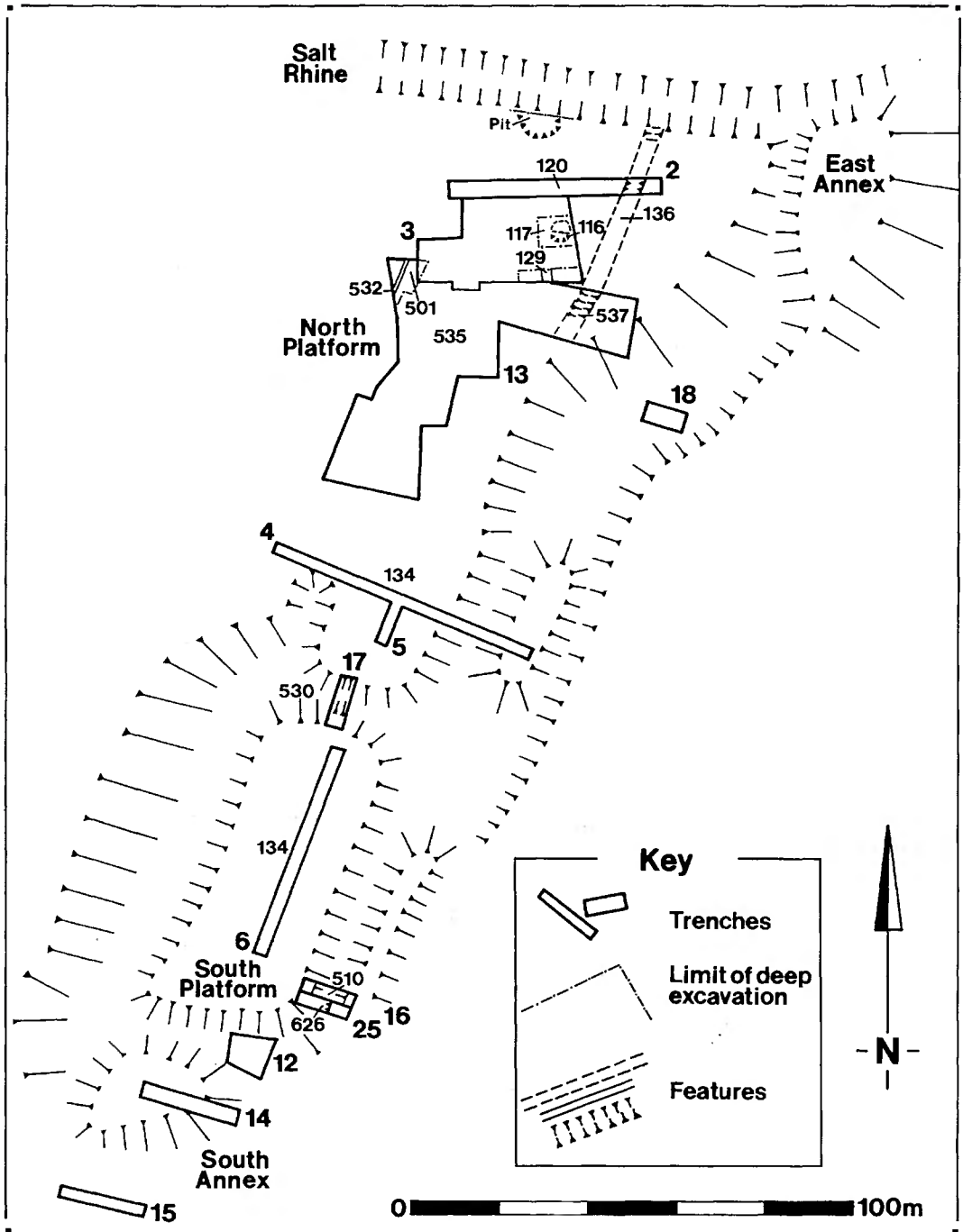


Fig. 4. Site 2, showing Trenches 2-6, 12-18 and 25 and phase 1-4 features.

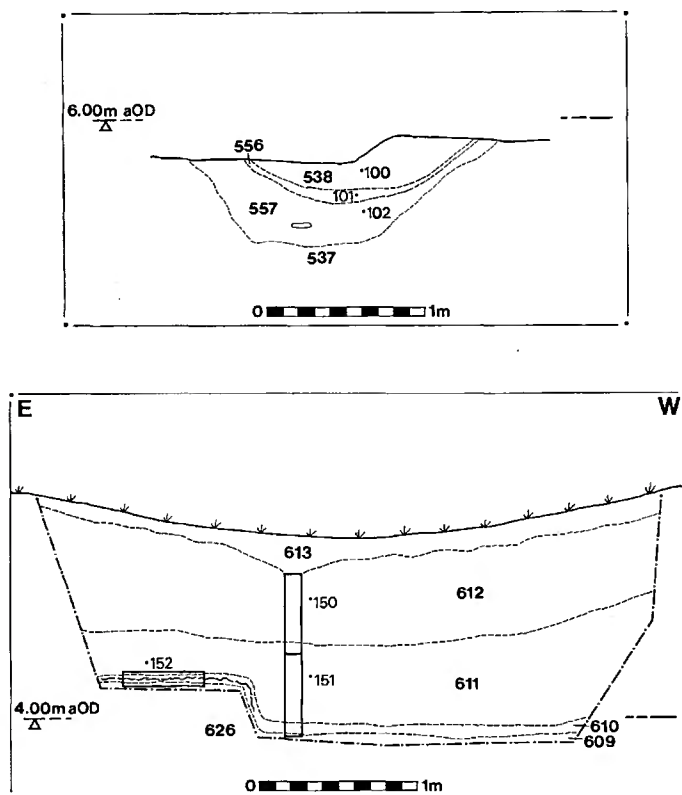


Fig. 5. Site 2 sections, ditch 537, Trench 25.

platform deposits, but well above the prehistoric surface. It is probably of Roman (or possibly of early medieval) date.

Phase 3 (Platform construction)

The North and South Platforms (Fig. 4) are composed of a general layer of clean, virtually stoneless grey-brown clay silt (118, 124, 129 and 135 in Trenches 2 and 3; 134 in Trenches 4, 5 and 6; 535 in Trench 13). This material appears to be an artificial mound of re-deposited upper alluvial silt, 0.4 m in thickness, presumably upcast from the excavation of the ditches. The South Annex (Trench 14) had no indications of upcast and thus was demarcated solely by the ditch.

The earliest ditches seen in Trenches 16/25 and 17 were 2–3 m wide and 1 m deep, cut into the grey-brown alluvium (510, 520: Fig. 6). There may have been additional earlier, larger, cuts: the fills were uniform and the tracing of cut lines proved difficult. Although no features were observed in Trench 12, there was a change in deposits at 1.3 m depth, probably marking the base of a ditch cut.

Phase 4 (Medieval occupation)

On the east side of Trench 3 (Fig. 4), where the higher ground of the North Platform begins to slope downwards, a layer of dark brown clay silt (117) was revealed at a level of *c.* 6.7 m above

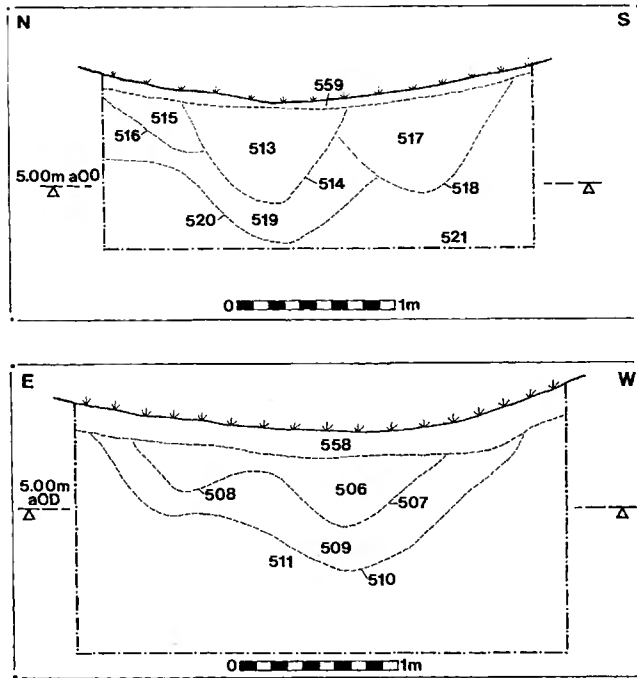


Fig. 6. Site 2 sections, Trenches 16 and 17.

O.D.; it contained charcoal fragments and sherds of late 12th–15th-century pottery. Associated with this surface was a flat-bottomed pit (116), of sub-rectangular plan, 2 m in width and 0.5 m in depth. The lower part of the pit had been burnt, and it was lined with reddish clay silt (132) containing ash and charcoal. The infilling deposits (115 and 131) also contained fragments of charcoal, burnt daub, bone, and late 12th–14th-century pottery.

To the north of pit 116, Trench 2 (Fig. 4) also revealed a deposit of dark clay silt (120) containing occasional charcoal sherds, which extended across the lower, eastern, side of the North Platform. At the east end of Trenches 2 and 13, a ditch, aligned approximately N–S, was intersected (Figs. 4 and 5). This ditch (136, 537), measuring 1.9 m in width and 0.6 m in depth, had been cut and backfilled from a surprisingly low level (*c.* 6.5 m above O.D.), 0.5 m below the present surface (Fig. 5); the fills (including context 557) produced medieval pottery. The ditch was also observed at the north end of the site during the watching brief. Samples from the fills were examined for plant macrofossils (Walker *et al.* 1998). Charred remains were few, but grains included bread wheat (*Triticum cf. aestivum*) and barley (*Hordeum* sp.), and awn fragments indicate oat (*Avena* sp.) (wild or cultivated). Weed seeds included *Anthemis cotula* (stinking chamomile) and *Chrysanthemum segetum* (corn marigold), typical of arable fields; *Trifolium* type and *Vicia/Lathyrus* possibly represented grassland or cultivation. Waterlogged seeds included *Lemna* (duckweed), *Juncus* (rushes), *Sambucus nigra* (elder) and *Rubus fruticosus* (bramble). There was no indication of occupation on the South Platform and South Annex.

Phase 5 (Post-medieval)

The bulk of the deposits revealed in Trenches 2 and 3 consisted of substantial spreads of mixed clays and stony material which have been interpreted as a series of yard surfaces laid between

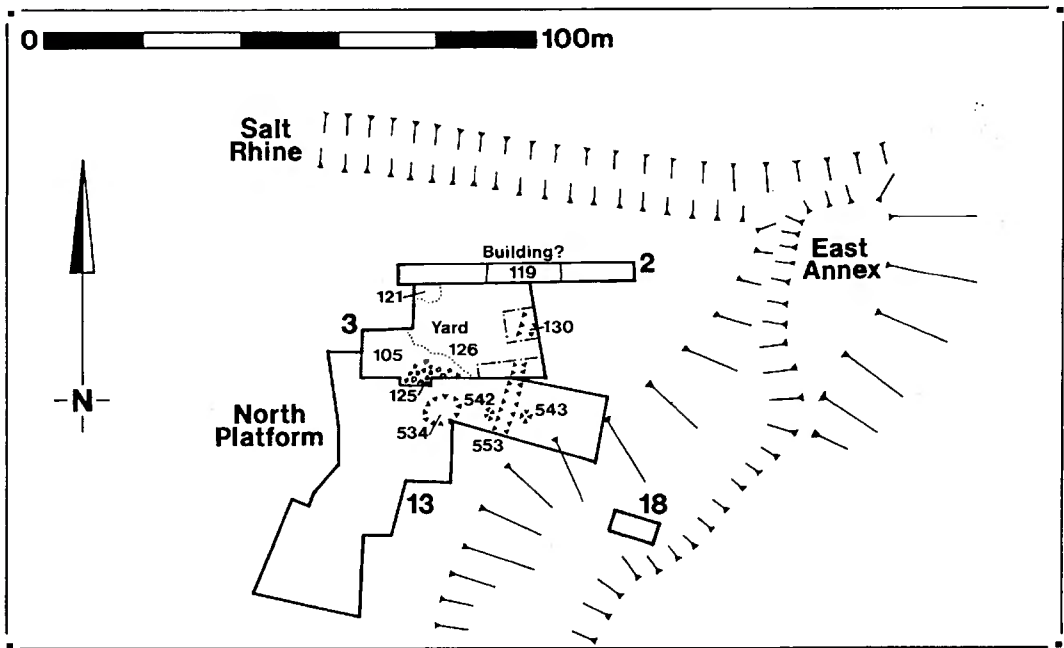


Fig. 7. Site 2, phase 5 features.

the 16th and 18th centuries (Fig. 7). It had been anticipated that Trench 2 would intercept the remains of a building shown on a map of 1772, but no masonry walls or identifiable robber trenches were recovered (Bristol R.O., 26570, Southwell Estate Book: Fig. 8). The map forms part of a survey of the estates of Edward Southwell. The area where the farmhouse was predicted to have stood produced considerable quantities of wall plaster, with charcoal and mixed silt clays (113), but very little stone or pantile. Even allowing for an extremely efficient robbing of the fabric, it seems unlikely that a structure on that site could have resembled the substantial mortared stone buildings of Rockingham Farm (Site 1). The slightness of the structural remains suggests that there had been little re-development of the farmstead in the later post-medieval period, so the farmstead may have been a relic of a rebuilding of the late 16th–early 17th century.

Visible in section in Trench 2 (Fig. 4) was a distinctive deposit of reddish silt clay (119), some 0.08 m in thickness, extending 6.5 m E–W at the approximate position of the building shown on the 1772 map. A few limestone fragments overlay the deposit but the main associated coarse components were wall plaster fragments. This deposit may represent a floor.

The preferred interpretation is that the farmhouse shown on the 1772 map was a non-stone structure, probably built in the late medieval or early post-medieval period. There is little surviving evidence for non-stone buildings on the Levels, partly, no doubt, because accessible quarries lay on the margins of the alluvial plain while local building timber (at least in post-medieval times) was in relatively short supply (Hall 1981). In regions with traditions of mixed structural fabrics, non-stone buildings (particularly those of lower status) are unlikely to survive into the present day. The building shown on the 1772 map appears to have been *c.* 12 m in length and 5 m in width, with short wings to the east and west. It may have been re-roofed in pantile, given the quantity found on the site.

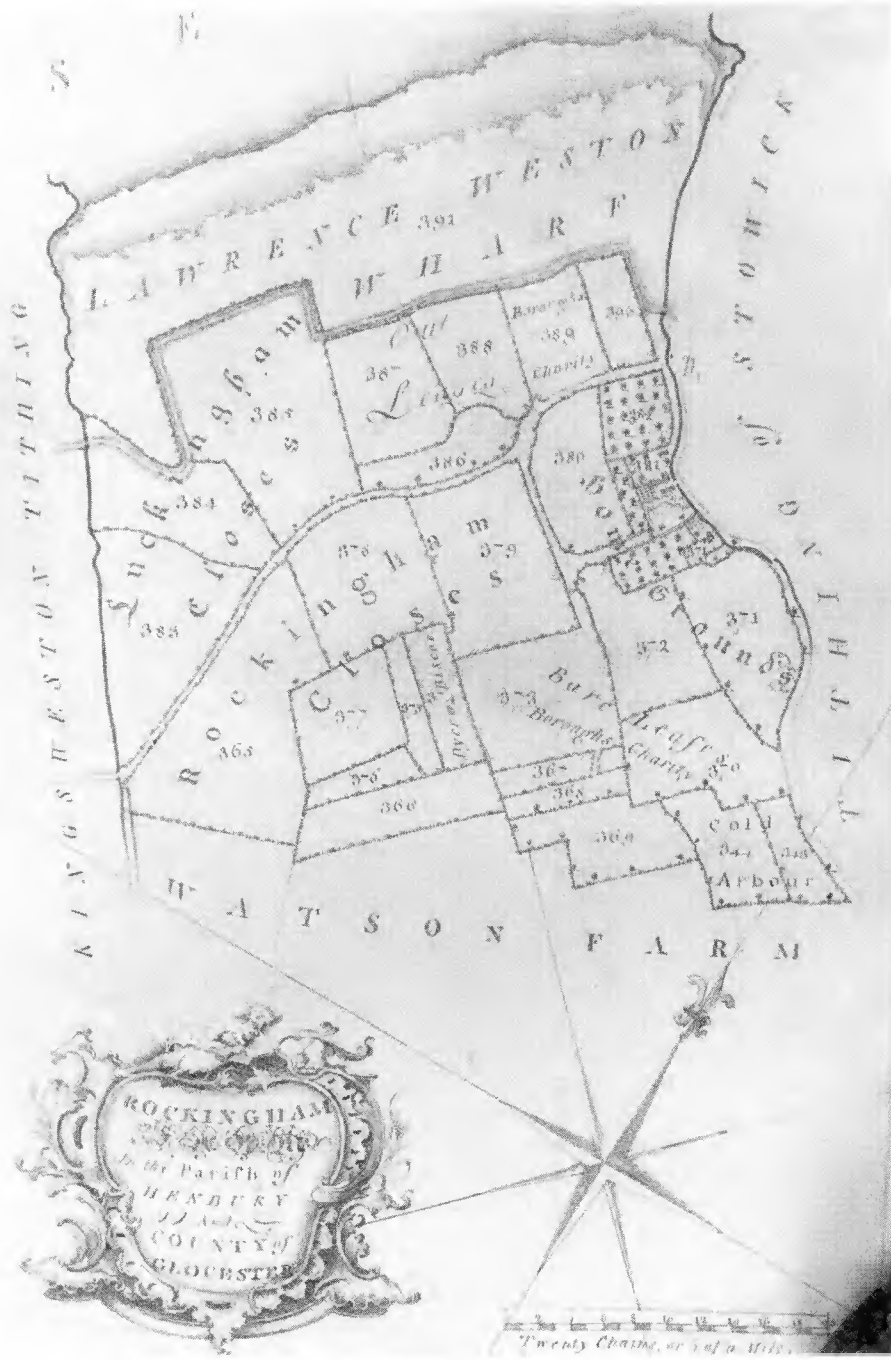


Fig. 8. Rockingham Farm in 1772 (Bristol Record Office, 26570; reproduced by kind permission of the City Archivist).

To the west of the farmhouse site was a series of stony clay spreads interpreted as open yard surfaces, probably separated by some form of partition. In the south-east part of Trench 3 (Fig. 4) a substantial robbed-out wall with mortared stone footings (130/553) was found; this feature can be tentatively identified with a boundary wall which is shown on the 1772 map and also on the Henbury tithe map of 1841 (Bristol R.O., EP/A/32/22). The wall follows the east side of the platform, probably acting as a revetment. The early maps suggest that it was about 65 m in length and returned at its south end to partition off the occupied area of the North Platform from the rest of the moated site, which was planted as an orchard.

The early maps indicate that, at its north end, wall 130 returned as a boundary that extended west across the platform. This boundary is represented on the ground in Trench 3 (Fig. 4) as a general demarcation between the deposits on the south side of the trench and those on the north. It is possible that there may have been a hedge or fence line here; the 1772 map shows a tree on the boundary line. On the south side was a distinctive pebble and clay surface (106) with occasional tabular limestone slabs and at least one substantial stone setting (125) which may have supported a pillar. On the north side was an apparent open yard surface of mixed silt clays and occasional limestone fragments (108), while a cobbled surface (105) lies to the west.

The high artefactual content of the post-medieval yard surfaces is notable, with quantities of pottery, as well as fittings, utensils and personal items being recovered from a fairly limited investigation. The less fragmented potsherds and most of the metalwork items were found along the edges of the yard surfaces, suggesting that refuse was able to accumulate undisturbed in those areas. The bulk of this material is relatively early, spanning the 16th, 17th and early 18th centuries, and there is surprisingly little pottery from the later 18th century.

To the south, in Trench 13 (Fig. 4), there were few features; two small pits lay in the east arm (542 and 543) and patches of charcoal (534) were also found. Several phases of re-cutting of the silted ditches were identified in Trenches 16 and 17 (Fig. 6).

The farmstead, still shown as a building in 1772 (Fig. 8) had been deserted by 1841 (Bristol R.O., EP/A/32/22), and the latest pottery from the site suggests that it was abandoned at the beginning of the 19th century. It is possible that the site was used for agricultural purposes after occupation had ceased, since the tenancy had been taken up by the owner of the adjacent Rockingham Farm. The tithe map suggests that walls were still standing in 1841; they had been demolished by the late 1870s (O.S. Map 1/2,500, Glos. LXXI.2, 1880 edn.). Some robbing of building materials occurred. A substantial deposit of rhine-cast clay, up to 0.2 m in depth, was spread across the northern side of the site. Planting of fruit trees took place, and an E-W sand path was laid across the middle of Trench 13.

Discussion

The most important evidence from the excavation is that the moated site has a medieval origin and that it was probably established in the 12th century. It thus appears to belong (in terms of both dating and form) to the mainstream of medieval moated sites in England and Wales. This is one of the first such sites on the Avonmouth Level to produce clear archaeological evidence, and its presence has a number of interesting historical implications. Medieval moated sites had a range of social and economic contexts, but a considerable proportion of them are thought to have been established as 'defensible homesteads' by those in the lower seignorial and upper freeholder ranks. The medieval archaeological evidence from Site 2 suggests this level of occupation. Although chance finds, particularly a ring and a delicate bronze buckle, suggest high status, the pottery presents a picture of relative poverty, which accords better with the nature of the structures. The size of the ditches makes their function as defences or status symbols unlikely: drainage was probably the principal concern.

The medieval tithing of Lawrence Weston was part of the parish of Henbury, in the late 11th century a member of the Bishop of Worcester's great manor of Westbury-on-Trym (Moore 1982, 3.1). In 1284/5 Walter Cantok and William of Vienne (*Weyn*) held estates in Weston St. Lawrence from the bishop (*Feudal Aids* 2, 234) and in 1303 William's heirs and Stephen of Saltmarsh (*Salso Marisco*) had estates there (*ibid.* 253). The estates were evidently descended from holdings recorded from the early 12th century (Hollings 1950, 412–13; Moore 1988). The demesne centres of these holdings (effectively manors) would probably have been on the higher ground in the vicinity of Lawrence Weston village, although they have not been located there. Below the lesser manorial level, however, was a class of prosperous freeholder, and it is at this stratum of society that one can best envisage the creation of Site 2 in the late 12th century.

The moat is located on a palaeochannel and it was clearly intended as a 'wet' ditch. In the Middle Ages the site would probably have been much closer to the estuarine coast than it is today; the lands to the west of the A403 road originated as reclaimed coastal wharf (saltmarsh). It is possible that this coastal land offered more opportunity for the creation of freehold properties — in much the same way as freeholds and moated sites are frequently associated with lands assarted from the waste. To the south and east the site is bounded by a vast expanse of former common meadow, the Madam or Mead Hamm fields. It is unclear whether the plant macrofossil evidence implies arable farming in the vicinity or the processing of grain produced elsewhere.

One of the curious aspects of the medieval site is the large size of the enclosure: it would appear that occupation was always restricted to the northernmost half of the North Platform. Thus a larger area was drained by the cutting of ditches than was necessary for domestic use. The use of moated platforms for gardens and orchards is known from elsewhere and is possible here.

Sites 3, 4 and 5

These earthwork sites (Fig. 9) lie in the two large fields to the east of Site 2, between the Salt Rhine and Lawrence Weston Road (Fig. 3). The known archaeological features consisted of two enclosures (Sites 3 and 4), visible on air photographs, corresponding to the area called 'Cold Arbour' on the 1772 map (Fig. 8); the name had become standardised as 'Cold Harbour' by the mid 19th century. A detailed contour survey was undertaken, covering an area of 3.5 hectares (9 acres); this revealed that the two enclosure sites are set in a landscape of other slight earthworks, including trackways, field boundaries and plough ridges. A third enclosure (Site 5) was also located. All three sites were surveyed prior to their burial by fill material for the development and one (Site 4) was evaluated.

Site 3 is a rectangular enclosure, 50 × 32 m, adjoining the Salt Rhine. Its north-west and south-west sides are defined by a ditch, now 6–10 m in width and 0.3 m in depth. There is a possible entrance causeway, 6 m in width, on the south-west. On the south-east, the enclosing ditch has been enlarged to become a linear pond, 40 × 15 m and 0.9 m in depth. A second possible causeway lies between the north end of the pond and the rhine. The enclosure lies on the west side of a broad droveway, 12–14 m in width, which extends for some 370 m across the fields to the Salt Rhine. A bridge (*the stoneing bridge*) was recorded crossing the rhine at this point in 1684 (Glos.R.O., D272 10/1/1, Commissioners of Sewers survey of the Lower Level, 1684), and the continuation of the droveway northwards past West House Farm towards Crook's Marsh is shown on the 1880 map (O.S. Map 1/2,500, Glos. LXXI.2, 1880 edn.). The west side of the droveway is defined by a ditch and bank, 13 m in combined width; the top of the bank is 0.4 m above the base of the ditch. The ditch and bank return westwards at their junction with

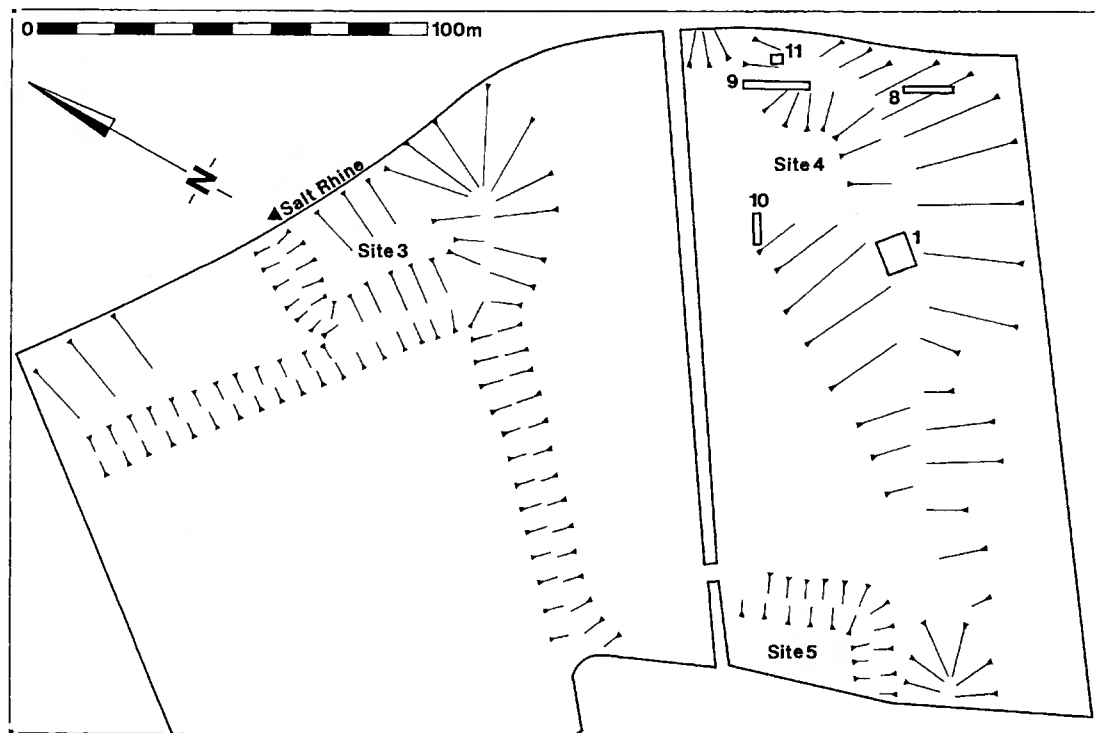


Fig. 9. Sites 3–5, showing Trenches 1, 8–11.

Site 3, but the ditch also feeds into a linear pond on the south-east of the enclosure. The pond appears to have encroached on to the droveway, reducing its width to 4 m.

Site 4 lies on the opposite side of the droveway, set back 20 m from it. A possible causeway or headland appears to link the enclosure with the droveway and may define one side of an access track. Like Site 3, this enclosure adjoins the Salt Rhine on the north-east, and it is defined by a ditch and a slight bank on its south-west. It is of similar size, 60×50 m, and also has a pond, or group of ponds, on its south-east side. The main pond is a substantial sub-rectangular feature, 32×22 m across and 0.4 m deep, and adjoins the rhine and seems to lie wholly within the enclosure. One or two smaller ponds define the south-east side of the enclosure and lead into the main pond. This enclosure appears to have a more complex internal arrangement than Site 3.

A third rectangular enclosure (Site 5) lies 110 m south-west of Site 3 and is also adjacent to the droveway. This enclosure lies in the corner of the field, and is defined by a ditch on its north-east and south-east sides; the opposite sides have been disturbed by the modern field boundaries. The surviving dimensions of the enclosure measure 35×17 m. A hollow, 0.4 m in depth, lies to the south-east.

The survey also revealed the expanse of degraded ridge-and-furrow across the two large fields east of Site 2. Individual ridges here are quite broadly spaced, at 15–18 m intervals, with headlands or baulks between adjacent furlongs. The droveway and its flanking ditch are respected by

the furlongs and are presumably contemporary with the ridge-and-furrow. The enclosures, however, appear to overlie the ridge-and-furrow. The present boundaries separating the two fields are later than the earthworks.

On Site 4, five trenches were excavated (Fig. 9) The first (Trench 1) was excavated immediately outside the enclosure, to a depth of 4 m below the surface, to record the underlying alluvial stratigraphy. Three machine trenches (Trenches 8, 9 and 10) and a smaller hand-dug trench (Trench 11) were excavated across the enclosure. Trench 9 was excavated across the north-west of the main sub-rectangular pond within the enclosure. Excavation revealed that the base of the pond and its adjacent bank were lined by a substantial spread of limestone rubble. Overlying this was a deposit of clay silts containing wall plaster and charcoal fragments (202). This deposit also yielded a considerable quantity of artefacts spanning the 16th and 17th centuries with a few sherds of late medieval pottery. There was no indication of occupation later than the first half of the 18th century, and it seems likely that the site had been abandoned for some fifty years or more before the area was mapped in 1772 (Fig. 8). Although the stone lining of the pond was found in Trench 11, the other two machine-cut trenches produced no archaeological deposits. It seems likely that the latter lie outside the enclosure.

The evidence from the contour survey suggests that the sites probably represent early post-medieval farmsteads. Site 4 produced construction debris and quantities of artefacts spanning the 16th and 17th centuries; it was probably abandoned by the early 18th century.

Site 6

This earthwork site (Fig. 10) lies in the field south-east of Site 4, on the south-west bank of the Salt Rhine (Fig. 3); it was first identified from air photographs taken in 1946 which showed a

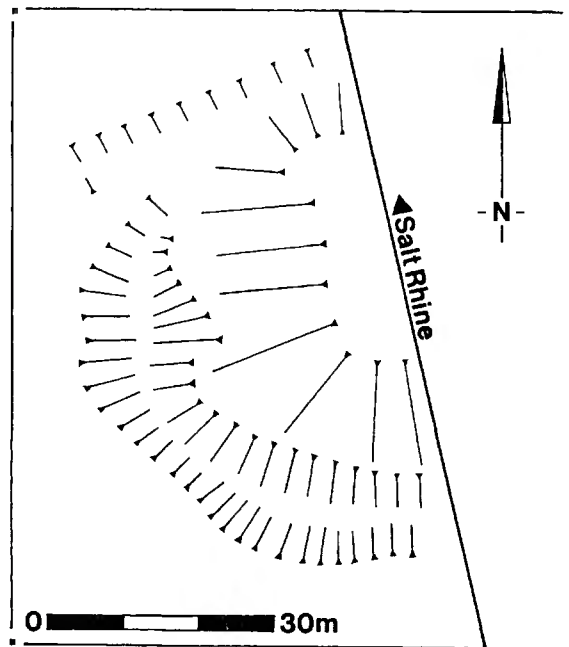


Fig. 10. Site 6.

trapezoidal ditch enclosing a platform on which some rectilinear features were visible. The relationship between the main ditch and the surrounding ridge-and-furrow (Fig. 2) suggests that they were contemporary. The site has been ploughed since the photographs were taken, and the earthworks have been heavily degraded.

Documentary and place-name evidence suggests that the site was occupied in the late medieval—early post-medieval period: in the index to the map of the land to the south of Rockingham Farm in 1772 (just off the map in Fig. 8), the field (no. 334) was known as ‘Old House Ground’, but it contained no building (Bristol R.O., 26570). The land had become part of the Southwell family estate by the mid 18th century (Glos.R.O., D272 10/2/1, 1753), and had been held as part of the Rockingham Farm lands earlier (Glos.R.O., D272 10/1/1, 1684). A 17th–early 18th-century cottage or farm building may once have occupied the site.

The earthworks comprise an irregular semi-circular ditch defining a platform area south-east of the Salt Rhine. The south part of the ditch is broad and deep (0.7 m below the platform level). The present surface does not drain to the Rhine; deeper hollows in the ditch form pools of water. To the north the ditch is less well-defined and distinctly shallower. The platform area includes a small level area to the east and a larger area to the west and south where the ground slopes gently towards the ditch. The surface is irregular, but no trace of structures could be seen.

The resemblance between these enclosures and medieval moated farmsteads is misleading: it seems that the enclosure ditches were excavated solely to facilitate drainage.

Rockingham Farm

The modern farmstead of Rockingham Farm lay to the west of Site 2. Investigation at the farmstead (Site 1) consisted of a detailed survey of the extant wall foundations and yard surfaces and a record of the elevations of the standing walls on the north-west side of the farmyard. The farmhouse, on the north side of the farmyard, appears to be late 17th or 18th century in origin but it may have replaced an older structure. The most interesting aspect of the Rockingham Farm site is its relationship with the adjacent moated farmstead on Site 2. The moated farmstead seems to have undergone a transition from being an occupied site of medium status in medieval times to obscurity and eventual abandonment. In direct contrast, Rockingham Farm appears to have been the largest and most prosperous of the farmsteads of the area, and it was certainly the only one to survive into the Victorian period. The farmstead underwent a series of substantial rebuildings from the late 18th century.

North of the Salt Rhine

In 1997 the area affected by the development was extended north of the Salt Rhine to accommodate additional buildings and to create ponds as a wetland habitat for wildlife. Evaluation of the area was undertaken in two stages; in the east six trenches (19–24) were excavated, and in the west eleven trenches (32–34) were excavated (Fig. 3). The evaluation revealed an unbroken alluvial sequence. There was no trace of the prehistoric drowned soil found south of the rhine, although in the north-east corner of the site (Trench 23) gleyed clay bands were noted at 5.3 m, 5.15 m and 4.4 m above O.D. The only feature identified was a 19th-century ditch in Trench 32.

FINDS

Introduction by Steve Sell

Considering the limited extent of manual excavation, the excavations produced a large quantity of artefacts (Table 2). Late deposits contained a fair amount of residual material. Metal-detector

Table 2. Summary of key finds-producing contexts.

context	location	phase	date
105	Site 2	4	No pottery; 18th century
107	Site 2	5	Late 18th–early 19th centuries
108	Site 2	5	17th century
115	Site 2	4	Medieval
117	Site 2	4	Medieval–early post-medieval
119	Site 2	3	Medieval
120	Site 2	3	Medieval
124	Site 2	3	No pottery
128	Site 2	5	No pottery
202	Site 4		17th to mid 18th century (at latest); clay pipes to 1700
538	Site 2	4	Medieval
539	Site 2	5	Mid–late 17th century
541	Site 2	5	Mid–late 17th century
557	Site 2	4	Medieval

scanning of the occupation surfaces and spoil heaps recovered more than 50 finds of all periods. For this report detailed publication has been restricted to those which relate to the use of the site prior to 1800. Full details will be found in the site archive.

The finds can give us little more than the broad date range of the various phases of settlement at Site 2. The ceramic assemblages provide some indications of sources. The sample is influenced by a metalwork bias resulting from some areas and levels being scanned by metal detector; this yielded material evidence to support Roman activity nearby, but otherwise did little but confirm the agricultural nature of the later settlements.

The medieval ceramic assemblage, beginning with Ham Green products in the late 12th century, provides the dating for phases 3 and 4 of Site 2. The dearth of fine or imported pottery, and the small size of the assemblage, are of note, providing no indication of high-status occupation. The absence of the North Avon gritty wares characteristic of the 10th–11th century in the area is notable (R. Burchill pers. comm.), implying that occupation at Rockingham was part of a second stage of medieval movement onto the Level.

Continuity of occupation through the later medieval and early post-medieval periods is indicated in the ceramic record, with activity likely to have been at its height during the 16th and 17th centuries. The indications are still of a relatively humble status, despite the greater frequency of imported pottery among the plain earthenwares, which are now found in some quantity. Imported pottery occurs to a significant degree on sites of this period, particularly on the coast, and thus it is no surprise to find imports from Beauvais (north France) and the Iberian peninsula alongside pottery from south Somerset and north Devon, as well as more local products.

It seems that abandonment of Site 2 took place in the second half of the 18th century, with later 18th- and early 19th-century industrial wares represented in destruction deposits; there are very few items to which a 19th-century date may be given.

COPPER-ALLOY OBJECTS by Glenys Lloyd-Morgan and Steve Sell

Catalogue of illustrated copper-alloy objects (Fig. 11)

1. Plate brooch with twelve lobes around the edge; one lobe is pierced to take a chain, presumably joined to a similar brooch. The other lobes are filled with enamelling, alternately red and blue. The upper

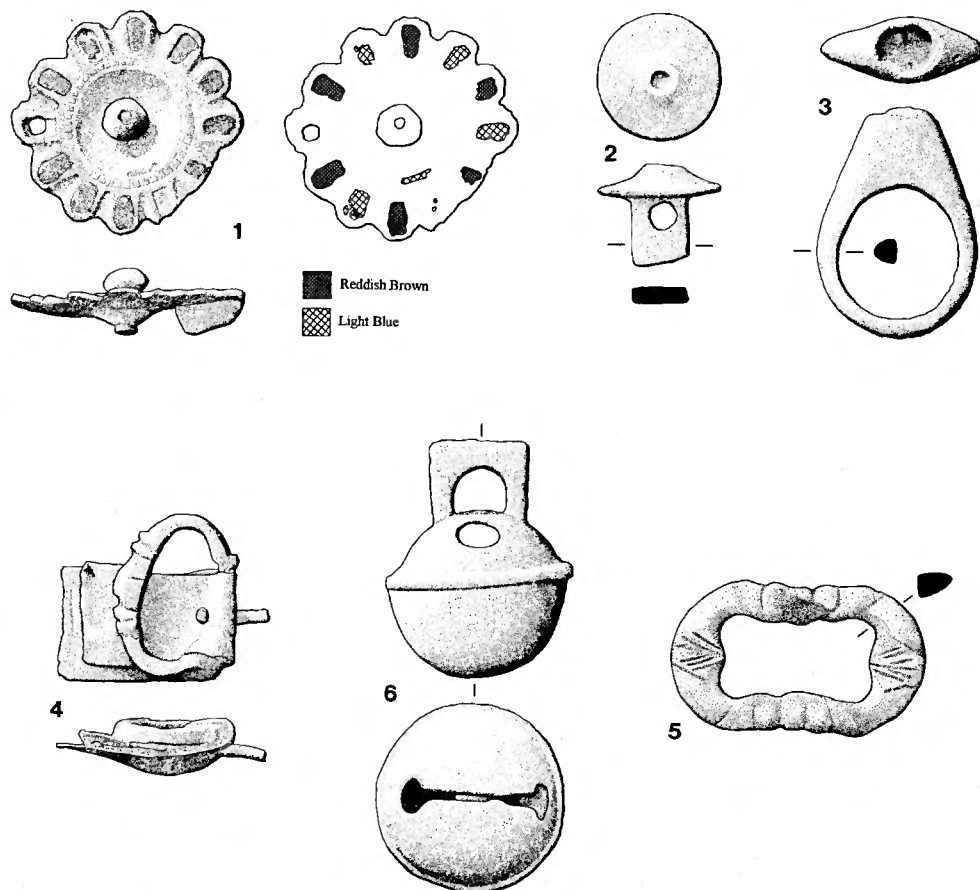


Fig. 11. Copper-alloy objects, nos. 1-6 (scale 1:1).

surface of the brooch appears to have been tinned or silvered. Around the central sunken area (where a patch of enamel survives) is a beaded border with a lightly incised border to either side. A central rivet with hemispherical head probably held a glass bead or one of bone or ivory. The catchplate is damaged and the fitting to take the pin is now lost. Maximum diameter 33 mm, height 9.5 mm. From context 100 (Site 2, topsoil) (SF 035).

Although no precise parallels have been located, it seems likely that the piece is Roman, probably datable to the 2nd century A.D.

2. Fitting with a conical head and central recess (for the centre point of a lathe?). The rectangular shaft is pierced by a circular hole. Diameter of head 18.7 mm, overall length 15.2 mm, cross-section of shaft 9.4×2.4 mm. From context 105 (Site 2, phase 5 cobbled surface) (SF 018).

Related fittings with domed heads were found on the German *Limes*, dated by Oldenstein to the 2nd century A.D., identified as fittings for shields (Oldenstein 1976, *Taf.* 50, 173-174, nos. 574, 577, 578, 580, 582).

3. Stirrup-shaped ring with hoop, extending to a pointed bezel, originally set with a ?glass gem stone. Perhaps a man's ring. Internal diameter 18.2 mm, external diameter 23.8 mm, maximum length 34.3 mm. From context 118 (Site 2, phase 3) (SF 017).

Similar examples include two from London (Egan and Pritchard 1991, 326–7, fig. 215, nos. 1608, 1609), one of which is dated to 1230–1260. Egan and Pritchard suggest that the type is unfashionable after the mid 13th century. Examples in gold continue into the 15th century (e.g. one from Blackfriars, Oxford: Hinton 1982, pl. 15). Examples set with gemstones have been dated to the 12th–13th centuries (Bury 1984, 23, pl. 25a, no. 633–1871; Tait 1976, 264, no. 462 and col. pl. 10; Saunders and Saunders 1991, 41, fig. 10, nos. 1 and 2).

4. Strap-end buckle. From context 118 (Site 2, phase 3) (SF 019).

Of 13th–14th-century date, to judge from similar examples from London (Egan and Pritchard 1991, 73, no. 297; 77, no. 313).

5. Shoe or knee buckle of type with chape. Frame only survives, with traces of iron corrosion from bar and pin. Length 37 mm, minimum width 21 mm. From context 500 (topsoil) (SF 053).

This type is dated to c. 1660–1720 (Whitehead 1996, 96–7 and nos. 431, 609–27).

6. Small 'crotal' bell with iron ball, undecorated. Diameter 28 mm, weight 26 gm. From context 108 (Site 2, phase 5) (SF 023).

These small bells were used for wide range of purposes, e.g. by shepherds to mark flock leaders. Probably 17th–18th century.

Also noted were a possible cauldron leg casting (124), a 'blazer' button (113), and the possible top from another button type (105). A few sheet fragments (all from 108) included one folded into a tube and another crudely punched.

IRON OBJECTS by Steve Sell

Catalogue of iron objects

1. Patten (Fig. 12), with one 'wave'. Length 185 mm, maximum width 90 mm. From context 108 (Site 2, phase 5) (SF 028).

Similar to examples from Aldgate (Grew 1984, 106, fig. 53, no. 58) and Llanmaes, Vale of Glamorgan (Courtney 1996, 212, no. 20); 17th–18th century.

2. Fish-hook. Length 55 mm, length of barb 15 mm. From context 104 (Site 2, phase 5) (SF 002).
3. Rectangular strap-end buckle, 40 × 35 mm. From context 202 (Site 4) (SF 039).
4. Square strap-end buckle, 30 × 30 mm. From context 500 (topsoil).
5. Tip of a possible sickle or scythe blade. Length 50 mm. From context 104 (Site 2, phase 5) (SF 046).
6. Very large stud with possible hexagonal head. Length 140 mm, diameter of head 45 mm. From context 104 (Site 2, phase 5) (SF 043).

Much of the ironwork recovered from the site is probably relatively modern in origin and likely to relate to domestic occupation and agricultural use of the land in recent times. Apart from the scatter of blades (six, from contexts 104, 107, 108, 202 and 500) and nails (a group from 104, and others from 108 (three), 202 (three), 379 (two) and 500), the assemblage contained a length of chain (from 104), parts of a pitchfork (from 202) and scissors (104) and a collar (108) of diameter of 55 mm, as well as less diagnostic items and fragments.

LEAD AND LEAD-ALLOY OBJECTS by Steve Sell

Catalogue of lead and lead-alloy objects

1. Conical or pyramidal weight, complete with iron loop for suspension. Weight 30 gm, height 25 mm. From context 113 (Site 2, phase 5) (SF 032).

These objects (as nos. 2–4 below) are usually interpreted as steelyard weights, although their variation in weight and lack of marking would have made such use difficult. Given the location of the site, these may have been used to weigh down fishing lines.

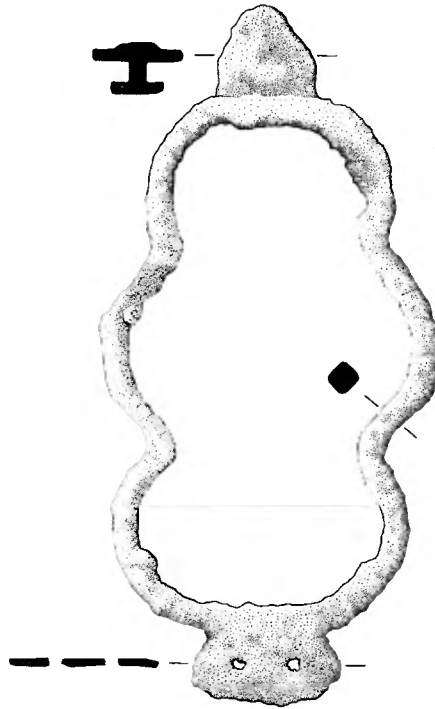


Fig. 12. Iron object (scale 1:2).

2. Conical weight, pierced vertically to take a rod or wire loop for suspension, now missing. There is a recessed area at the base of the piercing, perhaps for a washer to hold the wire in place. Weight 102 gm, height 27 mm. From context 113 (Site 2, phase 5) (SF 033).
3. Crude conical weight, pierced as no. 2, with a large hole, diameter 6 mm, at base. Weight 50 gm, height 22 mm. From context 202 (Site 4) (SF 014).
4. Very crude flattened conical weight, pierced vertically as no. 2, with a hole, diameter 3.5 mm, at base. Weight 108 gm, height 17 mm. From context 100 (Site 2 topsoil) (SF 036).
5. Plano-convex disc, perhaps used as a gaming counter. Possibly Roman. Diameter 16 mm, height 4 mm, weight 6 gm. From context 105 (Site 2, phase 5) (SF 020).
6. Slightly irregular disc, pierced centrally, with a second, subsequent or accidental, piercing to one side. Probably a curtain or clothing weight. Diameter 30 mm, thickness 2 mm, weight 10 gm. From context 128 (Site 2, phase 5) (SF 029).
7. Spatulate object, perhaps the handle of a spoon, in lead alloy, now much damaged; possibly waste. Length *c.* 100 mm, weight 34 gm. From context 104 (Site 2, phase 5) (SF 050).
8. Folded disc, probably a bale seal, with traces of lugs. Diameter 22 mm, weight 8 gm. From context 108 (Site 2, phase 5) (SF 022).

Three other undiagnostic fragments were noted, probably waste.

COINS by Steve Sell

Only two coins were recovered from the site despite the large numbers of other metal finds located by metal-detector.



Fig. 13. Coins: *ceutil* of Alfonso V (top), Bristol token, 1660 (bottom).

Catalogue of illustrated coins (Fig. 13)

1. Copper *ceutil* of Alfonso V of Portugal, 1438–1481. From context 500 (Site 2, topsoil) (SF 054).
The *ceutil*s of Alfonso V are very common and are found widely in south and west Wales (E. Besley pers. comm.).
2. Bristol farthing, 1660. Obverse 'THE ARMES OF BRISTOLL' around a design of a ship issuing from a castle. Reverse 'A BRISTOLL FARTHING' around 'C.B. 1660' in two lines (Williamson 1889, Gloucestershire no. 17). From context 104 (Site 2, phase 5) (SF 001).

MEDIEVAL POTTERY by Steve Sell

A total of 131 sherds, 1.84 kg, representing a minimum of ten vessels based on rim count, was noted from fifteen contexts. Only general clearance layer 500 contained anything more than a very few pieces; ditch fill 557 provided the only good stratified group, largely undiagnostic fragments of Ham Green cooking pots together with the rim of a Ham Green jug (Fig. 14, no. 9). More than 80% of the group are unglazed coarsewares, likely to be of local manufacture: Ham Green (Fig. 14, nos. 5–6), and other local products (probably Bristol). The assemblage is too small for meaningful fabric analysis, but large enough to make the complete absence of any imported finewares and the scarcity of glazed jugs worthy of comment. Occupation from the 12th century is evidenced by the presence of Ham Green wares and at least one fragment of a Bristol Redcliff jug was also noted (context 539), so there is no reason to doubt that this small group indicates some level of activity at Site 2 throughout the medieval period; there are no indications that a high-status site was involved. One fragment of glazed ridge tile was noted, from context 104.

Catalogue of illustrated pottery (Fig. 14)

1. Rounded everted rim, blackish soapy fabric heavily tempered with limestone and a little quartz; surfaces oxidised. Context 115.
2. Rounded everted rim, hard-fired grey sandy fabric with a little calcareous material; surfaces oxidised, externally sooted; decoration lightly scored. Context 538.
3. Upright everted clubbed rim, hard-fired grey fabric with brown surfaces, less gritty than no. 2, without obvious calcareous inclusions. Context 557.
4. Flared rim with clubbed end, dense hard-fired grey with some quartz grains visible, surfaces reddish. Context 119.

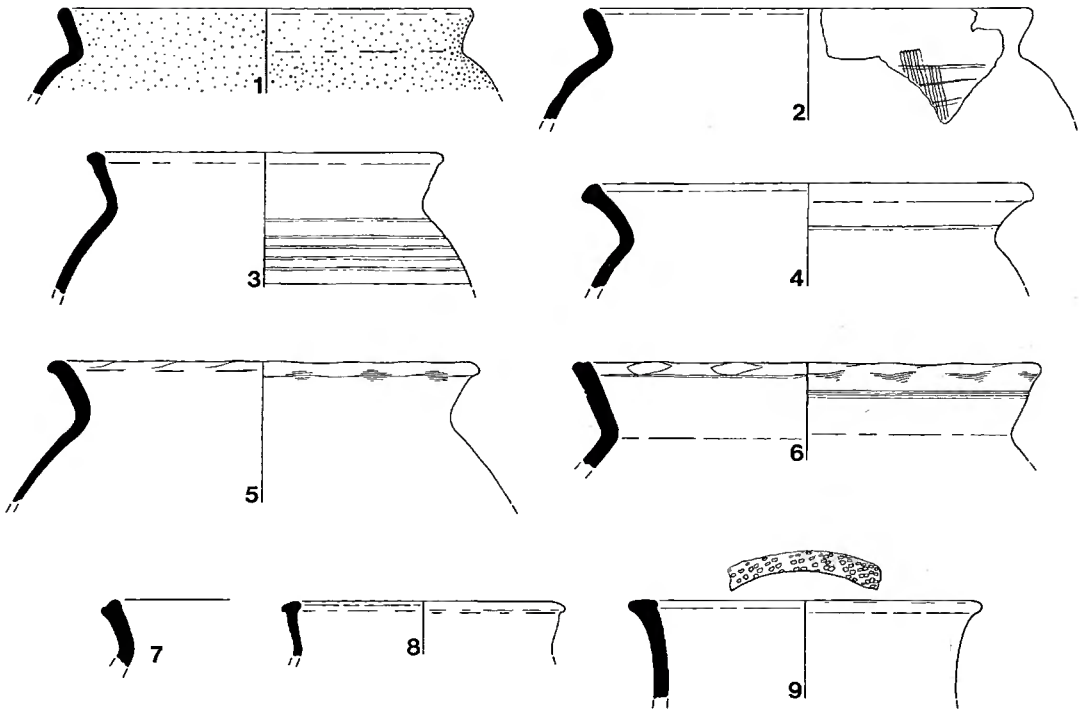


Fig. 14. Medieval pottery, nos. 1-9 (scale 1:4).

5. Everted rim in hard sandy fabric, grey with brown surfaces, wavy-edged thumbed decoration along rim. Context 557.
6. Long everted rim in fabric similar to no. 5, but with more quartz sand; core and surfaces grey, partially oxidised externally. Wavy-edged thumbed decoration along rim, double external groove below. Context 557.
7. Flared rim in hard-fired sandy fabric similar to no. 2, but with more large quartz/quartzite inclusions; dark grey-brown core and surfaces. Context 500.
8. Thin-walled vessel with inturned everted club-rim in dark grey fabric with much quartz, somewhat similar to no. 7; surfaces grey-brown. Context 113.

Nos. 2-8 are basically similar in fabric, with variable amounts and sizes of quartz grains. Many show signs of having been finished on a turntable; some or all of them are likely to be products of the Ham Green pottery industry, e.g. nos. 5 and 6, which display characteristic rim decoration.

9. Wide-rimmed jug (or ?pitcher) with upright flat-topped rim; hard-fired grey sandy fabric with buff internal surface and external iron-stained green glaze. Upper surface of rim decorated with oblique rows, mostly arranged in pairs, of squarish peck-marks. Context 557.

This vessel lacks the collar typical of Ham Green jugs but is similar in fabric and has the width of neck of the Ham Green 'A' jugs (this example has a rim diameter of 190 mm).

TRANSITIONAL EARTHENWARES by Paul Courtney and Steve Sell

This group (of 56 sherds, 1.06 kg) provides continuity between the medieval assemblage and the local red earthenwares of the mid 17th century onwards. Together they span the period of occupation of Sites 2 and 4 up to abandonment in the mid 18th century.

The assemblage includes imports from the Iberian peninsula (a pipkin handle from context 500), fragments of Merida ware (from context 104), and from northern France a sherd from a Beauvais 'medallion' jug (also from context 104). There are Cistercian-type blackwares (from context 108), possibly originating from the south-west Midlands fairly close to the Bristol area, and Malvernian imports from the end of the medieval period onwards.

During the 16th and early 17th centuries the major influence appears to have been south Somerset (including Nether Stowey: see below, West Country earthenwares). The Martincamp flask is also of 16th-century date (see below, Pre-industrial finewares).

POST-MEDIEVAL POTTERY by Steve Sell

Local red earthenwares (local coarsewares)

A total of *c.* 325 sherds, 6.65 kg, of local red earthenwares, representing a minimum of *c.* 40 vessels based on rim count, was recovered from the excavations; these sherds dominate the post-medieval assemblage, with contexts 104, 107, 108, 202 and 500 being the major contributors. Although much of this assemblage is undiagnostic, and frequently heavily abraded, it has in general an early feel, apart from contexts 107 and 110 which extend the date range for the site into the later 18th or early 19th century; the assemblage certainly overlaps with the earlier or transitional coarse earthenwares of the 16th or early 17th century (see above). The great majority of the local coarsewares are probably not far separated in date and would fit well between the mid 17th and mid 18th centuries. Flatware forms (pans, dishes and bowls) predominate and many vessels are partially or wholly reduced, giving a variety of green glazes.

West Country earthenwares

Gravel-tempered plainwares from the north Devon production centres were much fewer in number, with a total of 53 sherds, 2.19 kg, representing *c.* 17 vessels based on rim count. Slipwares with *sgraffito* designs cut into the body of the vessel were also noted, including part of a large dish with freehand ?floral design (Fig. 15) and the lower half of a globular jug, now badly fragmented, with abstract design. Both are likely to be of later 17th-century date. Also present were a few sherds from the Nether Stowey (south Somerset) pottery industry, of probable early 17th-century date (M.W. Ponsford pers. comm.)

Pre-industrial finewares (buff slipwares, stonewares and tin-glazed earthenwares)

Quantities were small, and distribution provided little additional dating evidence for key contexts. Buffwares, however, were well represented in context 113, giving a probable terminus of *c.* 1750, as well as being present in the larger general contexts; reeded tankards, however, and other buffware forms with iron-rich glazes were almost entirely absent; tin-glazed earthenwares were also very scarce. A crudely-fashioned roundel from the body of an ?undecorated cup is worthy of note (context 107).

A few early stonewares also occurred, in general layers only; these included three sherds of a Martincamp flask Type II, probably from the same vessel (context 202) of probable late 16th-century date (Hurst 1966).

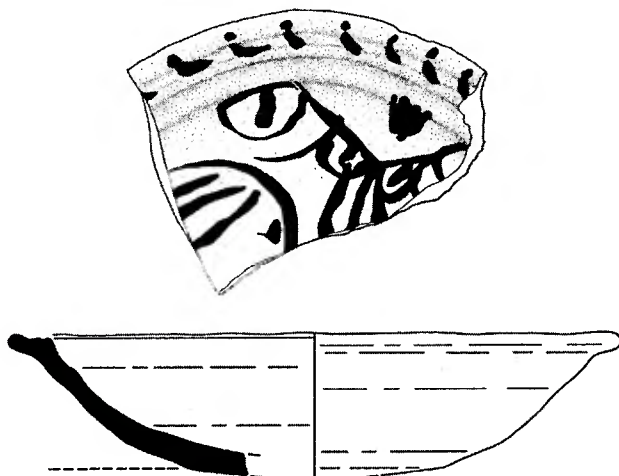


Fig. 15. Post-medieval pottery (scale 1:4).

Industrial wares

The ceramic sequence is completed by creamwares, white earthenwares and other ceramics of the later 18th century onwards. None need be later than the early part of the 19th century. A few pieces of late 18th/early 19th-century date occurred in general layers 104 and 500, but two contexts, 107 and 110, contain significant quantities of material within this date range. Creamwares predominated within context 107 alongside pottery from earlier in the 18th century; most sherds appear to derive from two vessels, although at least four vessels were present (total *c.* 50 sherds, 0.71 kg). White earthenwares were also well represented in this context (at least five vessels, weight 0.54 kg), with an almost-complete feather-edged pearlware plate with makers' stamp POUNTNEY & ALLIES around a crucifix (fl. in Bristol 1815 — 1835: G. Evans pers. comm.). In context 110, quantities were much smaller, particularly in creamware, but the ceramic types represented are similar and likewise extend the date range of this group.

CLAY PIPES by Gill Evans

The assemblage of clay tobacco pipes can be dated to the 17th century. The 74 stem fragments, although too few for formal stem bore analysis, have diameters over 2.5 mm and are thus of 17th — early 18th-century date. The seven illustrated pieces are of similar date and of local origin (Jackson and Price 1974).

Catalogue of illustrated pipes (Fig. 16)

1. Small, dainty, well-made bowl, with 'button-top' milling. Large round broken heel has, stamped incuse, the maker's mark 'WC' with motif over. Bristol, early to mid 17th century, maker unknown. From context 202 (Site 4) (SF 011).
2. Well-made, chubby, forward-pointing bowl with 'button-top' milling and slight burnishing; large, round, unmarked heel. Bristol/Gloucester, 1630–1660. From context 202 (Site 4).
3. Taller, forward-pointing, waisted bowl, slightly burnished, with high 'button-top' finish. Large round unmarked heel. Similar to Peacey (1979) Gloucester type 4, 1670–1700. From context 202 (Site 4).

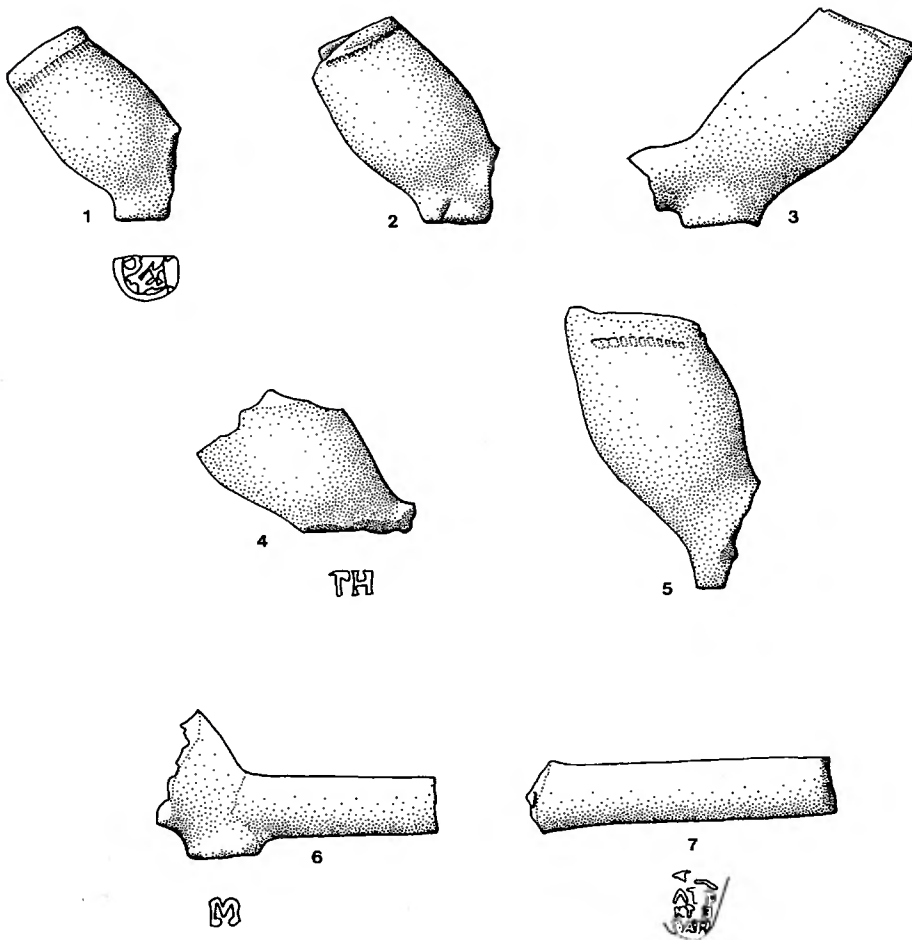


Fig. 16. Clay pipes, nos. 1-7 (scale 1:1).

4. Bowl with stamped incuse on back giving the maker's mark 'TH'. Bristol, ?Thomas Harvey or Thomas Hicks, *c.* 1700. From context 107 (Site 2, phase 5) (SF 051).
5. Well-made burnished bowl, with low milling and small unmarked spur. Similar to Peacey (1979) Gloucester type 9, 1690-1720. From context 202 (Site 4).
6. Stem fragment, 3 mm bore diameter, with large round heel stamped incuse with a crude single 'M'. Bristol, early-mid 17th century, maker unknown. From context 202 (Site 4) (SF 012).
7. Stem fragment, with faint oval cartouche '— P/NTE/BATH' [E is retrograde, and T and H ligated]. Attributed to Robert Carpenter of Bath, working 1694-1739 (Owen 1979, 156; Lewcun 1994, 129). From context 104 (Site 2, phase 5) (SF 058).

ANIMAL BONE by Martin Locock

A total of 264 bones was recorded (Table 3); the majority were from the post-medieval phase of Site 2. In general, the bone is in a good condition, although there is a high incidence of gnawing (nearly 10%); only 3 burnt bones were found.

Table 3. Animal bone, by species and number of identified elements.

site	cow	s/g	pig	horse	fowl	unidentified	total
Site 2	24	32	4	3	0	153	216
Site 4	1	1	3	0	1	42	48
Total	25	33	7	3	1	195	264

In the assemblage from Site 2, the proportions of 1st- and 2nd-class meat bones from sheep/goat and cow imply butchery and consumption on-site. The pig bones were all 2nd-class; it is usual for 1st-class pig bones to be poorly represented in post-medieval assemblages, probably because of different methods of jointing (Locock 1993, 186). From Site 4, most of the bones were large fragments; the pig and sheep/goat bones were 1st-class, the cow bone was 2nd-class.

The species represented are those to be expected from an English site of this period. Other sites near Bristol have produced similar results (e.g. Harry Stoke, Stoke Gifford: Serjeantson 1995). It is interesting to note, however, that the presumed emphasis on cattle (for dairying) in the economy is not reflected in the bones. It is possible that this is because the animal bones are derived from butchery and consumption on the farm, and that cows for slaughter were sold (in Bristol, perhaps) rather than butchered or eaten on site.

It is interesting to compare the results of this analysis with documentary evidence from the site, particularly probate inventories dated 1674 and 1689 for two successive owners of Rockingham Farm, Richard White and Arthur White of Henbury (Bristol R.O., Inventories 1675/74, 1688/49). At his death, Richard White possessed 'plow oxen and kine & young beasts', horses, 'two piggs prised at £1', 'fowles & powlterry'; in addition to the animals, his estate included corn, cheese, beef, bacon and wool. In his will, there is mention of a dairy building separate from the main farmhouse. With a total estate of £283, Richard White's status as 'yeoman' was well justified. His son Arthur possessed 6 oxen, 14 kine, 13 'young beast', 3 horses, geese and hens and his stores included corn, bacon and cheese; his estate was valued at £224. It is likely that the terms 'oxen' and 'kine' are used to distinguish between plough animals and the dairy herd. It is clear that arable production was a significant part of the farm's economy; plough harnesses and stocks of corn also appear.

The only omission from the animals expected from the bone evidence is that of sheep, represented in the 1674 inventory solely by wool; valued at only 10 shillings, this may have been for personal use. This evidence implies that the sheep bones were the product of the purchase of sheep for slaughter. This would mean that the farm economy had abandoned a self-sufficient subsistence strategy in favour of specialisation and the cash economy. By the mid 17th century, this is not unexpected, but the close comparability of the earlier assemblage suggests that this economy is of some antiquity.

OTHER FINDS by Steve Sell

Some pantile was recovered, mostly from context 104; slate and plaster were also noted. Fired clay fragments from contexts 104 and 113 may be from an oven or hearth lining. A broken whetstone of sub-rectangular section was found in context 557 (phase 4 medieval ditch); it is of fine-grained micaceous sandstone; two faces are well-worn, another has a linear groove, probably resulting from sharpening of points, and there is oblique scoring on the fourth unbroken face.

Very little glass was noted: 18 sherds of bottle/vessel glass and five fragments of window glass. All are likely to belong to the late 17th–18th centuries. The base of an 'onion' bottle was found

in context 104, with two small flasks, probably 18th century. Context 110 contained the neck of a cylindrical bottle of c. 1780, with a down-tooled string rim; context 107 contained a 19th-century fragment, from a square-section bottle in blue-green glass.

DISCUSSION

Prehistoric Background

The gleyed drowned soil and organic horizons seen at Rockingham Farm are not known elsewhere on the Avonmouth Level, although a directly comparable layer has been found at Hill Farm, Goldcliff, on the Caldicot Level east of Newport (Locock 1997, 1998). The presence of reed ash suggests that it reflects the existence of extensive reed beds. This area was clearly on the coastal margin in later prehistory, with only temporary stabilisations in the sequence of saltmarsh and silting.

The Roman Levels

The nature of Roman occupation on the Levels has been the subject of much discussion. The bedrock immediately east of the alluvium is occupied by a series of sites, including Kingsweston villa and Cattybrook, known for many years (Boon 1950; Bennett 1980; Fig. 1). More recently, settlements have been identified on the Levels at Crook's Marsh Farm (Everton and Everton 1981) and Northwick (Bellamy and Barnes 1993). A stabilised Iron-Age/Roman buried soil horizon has been mapped by extensive auger survey as part of the M49 Second Severn Crossing work by Wessex Archaeology; it appears to form a series of islands associated with Iron-Age and Roman occupation, presumably in slightly higher areas where flooding either had ceased or was prevented. Rockingham was presumably regularly flooded.

The recovery of the metal finds, and particularly the brooch, from residual contexts is enough to show, however, that a settlement may lie close to Site 2, presumably just to the east. The 'inlet' shown by the deeper contours (Fig. 3), branching off the Salt Rhine, suggests a landing place, and from the mouth of the Salt Rhine it would be simple to sail along the coast to Abonae (Sea Mills), Aust, and Gloucester, or across the Severn to Caerleon and Caerwent. An example of a boat taking part in such trade has recently been found at Barland's Farm, near Magor, Gwent (Lawler and Nayling 1993; Nayling *et al.* 1994).

The Medieval Landscape

Although Saxon charter and place-name evidence implies activity on the Levels (and most notably the existence of the Mere Bank), it is unclear how far the drainage of the Levels had progressed by the medieval period. A substantial proportion of the modern ground surface retains traces of ridge-and-furrow earthworks; aerial photographs from 1946 record the features prior to the subsequent loss to development and degradation by machine ploughing (Fig. 2). The antiquity of the ridge-and-furrow, and the related question of the date at which silt accretion ceased, have been the subject of much debate. On morphological grounds, the earthworks could be medieval or post-medieval, and argument has therefore concentrated on the association of the earthworks with other sites or documentary sources. Iles, for example (Iles 1986, 115), uses the evidence for extensive arable farming in the manor of Henbury in the 13th century presented by Dyer (1980) to suggest that it had an early origin. Conversely, the detailed study of the area between the Salt Rhine and the Mere Bank undertaken as part of the Second

Severn Crossing work showed a correlation between parts of the Great Madam common meadow which were uninclosed strips and areas without ridge-and-furrow; Lawler (1993, 6) notes

None of the areas in which uninclosed strips had survived contained ridge-and-furrow, although ridge-and-furrow was generally present in the fields surrounding the uninclosed lands. What makes this particularly significant is that there are a number of other chance survivals of a few uninclosed strips within the Lawrence Weston fields and invariably these appear as gaps in the plot of ridge and furrow.

The presence of ridge-and-furrow on Marsh Common, reclaimed from the sea in 1684, demonstrates that a late date is possible. For the area south of the Salt Rhine, it would appear that the ridge-and-furrow may not be medieval in origin; the seed evidence for arable is equivocal.

There remains the question of the evidence for occupation on the site. Although the eastern sites (Sites 3–6) can be assigned to the late medieval/early post-medieval period, Site 2 is firmly medieval. The finds suggest an origin in the 12th century; it is interesting that the evidence from Seabank, to the north, implies that occupation on the Levels was becoming possible in the 12th century (Insole 1996, 104).

The Post-Medieval Landscape

Two phases can be discerned in the post-medieval period: initially, the creation of a series of moated (perhaps better described as ditched) enclosures, probably small farmsteads, occupying the edges of the common; and secondly the inclosure of the common land and the consolidation of farms into large units. Although the area was formally inclosed in 1811, earlier estate maps show that the process was well-advanced by the mid-late 18th century, and documentary evidence suggests that it had started in the late 17th century.

The switch in location for Rockingham Farm from Site 2 to Site 1 may have been partly for convenience, but it seems reasonable to suppose that the occasion of the move was the creation of a substantial farm by the merging of smaller units. The intensification of agriculture for convertible husbandry may have pushed the farmers towards ploughing to improve drainage.

Conclusion

The preliminary impression of the Rockingham Farm site was that it was essentially a medieval landscape, with moated farmsteads and associated ridge-and-furrow. The truth is more complex, and more interesting: some elements of the layout do stretch back to medieval times, but most seem to be relatively late additions. The opportunity to study a group of superficially similar sites has shown the perils of oversimplification and the existence of different routes to the same final form; any settlement on the Levels in the pre-modern period is likely to be ditched; any attempt to plough the fields will create ridge-and-furrow.

The decision to occupy a very wet part of a wet landscape is not readily explicable, although the importance of the Severn as a link for trade (as reflected by the presence of Portuguese coins and European pottery even in a site of fairly low status) may be significant.

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