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AD AXIUM - FACT OR FANTASY?

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&
Chris Richards

The westernmost end of Mendip abutting onto the Bristol Channel presented a challenge to nineteenth century Roman antiquarians. A fictitious name, Ad Axium, was given by Sir Richard Colt Hoare (1821) to a supposed Roman station which theory dictated should command a road to a port on the river Axe, the only river of the area. Subsequent writers used the name to refer variously to earth-works at Uphill, Oldmixon and Bleadon. It was O G S Crawford who, in 1929, saw through some of the confusion on the O S record card ST 35NW2 he stated that a number of authorities erroneously identify the strip lynchets near St Nicholas Church at Uphill with a supposed Roman camp, Ad Axium, found by Colt Hoare but that this is clearly shown further east on Hoare's map. Crawford does not however identify the spot precisely. The present writers went back to the earliest sources to try and resolve the matter and to investigate whether anything survives today of Hoare's so-called Ad Axium.

Hoare, in his search for Roman roads through Wiltshire, designated one from Salisbury to the river Axe and then set out to find it, pursuing it in his own words,' from the finding to the death' (see *Ancient Wilts: Roman Era,* 1821, Iter II). At his conclusion he remarked 'At mile 53½ we reach the termination of this Iter on the banks of the river Axe; for which reason my friend Mr Leman has given it the very appropriate title of Ad Axium; for here we find the decided vestiges of a Roman station not far distant from the river Axe'. (It is actually at least one mile from the river). In the foregoing description, he writes, 'The exact site of this Station is marked on our Map, and there are evident vestiges of a square circumvallation, and we found many fragments of antique pottery. From hence the line (of the Roman road) points directly to a barrow behind the house of a Mr Page (*sic*: should read Payne) on which line we also picked up a large piece of the red Samian pottery. Beyond this tumulus, we have on one side the name of Borough Walls, near the river Axe: and on the other side, that of Cold Harbour, so usually attendant on Roman roads and stations.'

It was Hoare who was responsible for initiating the description the'seaport for exporting their minerals', an idea which lingers on in popular writing today, even though, as Elkington has said (1976) there is no record of any pigs of lead being discovered west of Charterhouse. Hoare did not offer a precise location for the port but thought it was defended by a fort at the east end of Brean Down and therefore lay in the shadow of Brean Down on the river Axe or on the coast itself, just to the north. He then goes on to say. 'But to add to the general satisfaction and information which any future antiquary who may be induced to follow our steps on this coast may derive, it is necessary to point out to his observation a most interesting spot' near Bleadon where 'there are decided vestiges of a very extensive British settlement, covering on all sides a wide tract of land, as far as the Roman station. On viewing this ground, which slopes so beautifully down to the banks of the river Axe, in the form of a grand and spacious theatre, we cannot but admire the good taste of those Britons who selected it for their residence, previous to the coming of the victorious Romans'.

To summarise, Hoare actually says very little about Ad Axium itself, and the map is his most important contribution. Surely there should be something more, especially as a footnote refers to 'My friend Mr Skinner who has twice accompanied us over this barren district and by his zeal and activity has made some important discoveries'.

The Revd John Skinner's unpublished journals in the British Library contain a wealth of information about,and numerous sketches of sites in South Avon. They are invaluable as a day to day record of his field observations, together with thoughts and changes of mind. Six visits to the Uphill area have been noted, between the years 1818 and 1829. On the first occasion,he was accompanying Hoare on his excursion to trace the western part of the Roman road along the top of Mendip Hill to Uphill. Also with the party were Hoare's surveyor Mr Philip Crocker, and Mr Spencer, who was engaged in a calamine speculation at Shipham. Skinner records the line of the road along Banwell Hill. Of the area around Uphill church he says 'We searched in vain for pottery on this eminence. If the Romans had a station, probably it was in the lower ground near the Axe which might have been covered with the sand'. Then they rode along the sands to spend the night at Weston-Super-Mare, as the next day was to be devoted to an examination of Worlebury camp. Digging inside Worlebury yielded disappointing results for Skinner so when the labourer told him about a skeleton, brooch and coins which had been dug up three years ago under a heap of stones on Oldmixon Hill, he returned to the Hotel, mounted his horse and proceeded

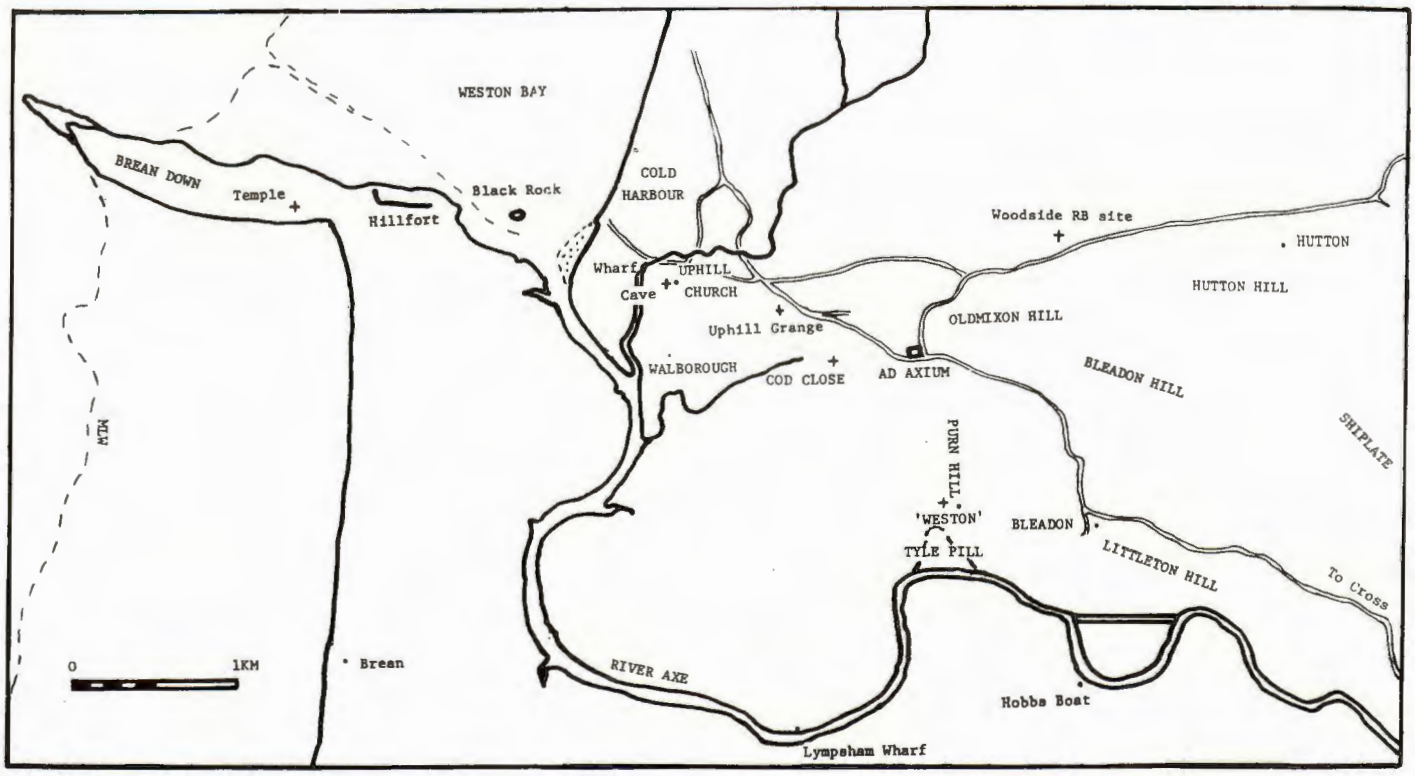

Fig 1 Map of Uphill and part of Bleadon showing location of places mentioned by Skinner, including Ad Axium

directly there. The barrow was in a cornfield. He writes: 'Dismounting therefore, I went directly to the spot, and on examining the ground carefully, found some Roman pottery near at hand; and on traversing the field, picked up several pieces of grey and black pottery: I also noticed the corner of the station, facing the north-west, rounded off, but I was so impatient to mention the discovery to Sir Richard I did not wait to make further observations but returned to the Hotel as soon as possible. Sir Richard was delighted to hear of the discovery and, after dinner, Mr Crocker and Mr Spencer returned to the spot to make more accurate observations.

'The station appears to have extended a considerable distance in the field to the right of the Bleadon Road. Also to the southwest as fragments of pottery we found scattered along the ground in these directions, as the same kind as I before met with, viz: grey and black. I also picked up a piece of fine Coraline, and learnt from a man residing near the spot that they had found small copper coins at different times whilst ploughing .... Above the station are a number of small British enclosures, and on Bleadon Hill, extensive encampments ... When the corn is off the ground I shall make a point of visiting the spot at my leisure as I am confident a great deal is yet to be seen and other remains yet to be discovered on the line of the Roman road to the station and from thence to the Severn'. (Skinner was of the opinion the Roman road ran to the west of Uphill Church but Crocker and Spencer seemed to be of a contrary opinion). 'Sir Richard Hoare was delighted at the discovery of the station, but could not accompany us thither having sent his horses back to Stourhead. I fear he has fatigued himself too much in this hot weather, as he complains of a pain in his arm and apprehends an attack of the rheumatic gout'. (In this transcript the name 'Bleadon' has been inserted although Skinner had written 'Blagdon'.)

Skinner's single sketch on this visit shows the road from Bleadon to Uphill going through a rectangular enclosure, the greater part of which lay to the south side of the road. He marks a 'Roman burying place' in the north-west quadrant, close to the road. Probably it was at this time that Crocker made his survey which was used for Hoare's map of the Roman road, (published 1821). Hoare's enclosure is certainly larger than the one drawn by Skinner on subsequent visits.

The next visit made to the area was in August 1819 with Mr Crocker. As they approached from Cross, Skinner remarked 'Bleadon must have been a place of great population, the sides of the hills for four or five hundred acres being intersected with square enclosures ... That these divisions were walls of loose stones is evident, from the foundation still remaining in most of them; and we learned from a farmer close at hand that he had removed immense quantities, some of the pieces being upwards of an hundredweight. He also informed us, in clearing the soil, he frequently found brown pottery and human bones. From the vicinity of the Roman station at Uphill, which is only a continuation, or rather an addition, to the Belgic Oppidum, it is reasonable to suppose that before the arrival of the Romans, Bleadon was a port and that the River Axe was the channel by which their coracles and light vessels communicated with the Severn; but the Romans preferred occupying a post nearer the mouth of the river, as more convenient for their larger craft, which might have been drawn up at low tide on the shore at the back of Brean Down, which seems to have been fortified for the security of the harbour. As the site of the Roman station

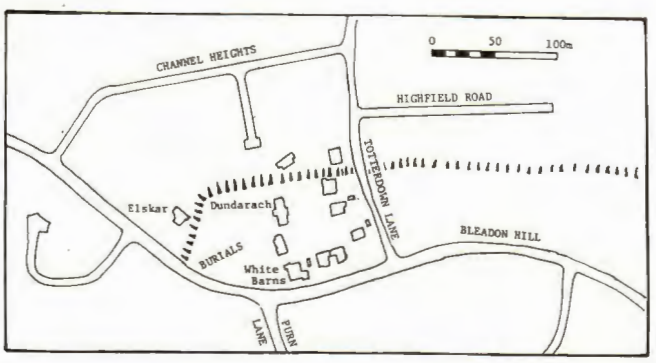

Fig 2 Detailed location of Ad Axium, showing position of existing banks (only the houses inside and adjacent to the earthwork are shown)

we discovered last year is now waving with corn, we had no room for extending our researches, which I greatly regretted, as I purposed digging below the surface, to examine whether any foundation of their buildings are remaining.'

Having put up their horses they procured two men and proceeded to open Walborough, 'the barrow south-west of Uphill Church which Sir Richard Hoare was anxious to have examined. After a homely dinner at the Ship Inn, alias Public House, Mr Crocker proceeded in the Custom House boat across the Axe to Brean Down whilst I returned to the tumulus ... (As he) purposes giving (me) a copy of his plan I shall be compensated for my disappointment in not accompanying him. Our time had been so fully occupied it was past eight before we remounted our horses, and upwards of an hour and a half more ere we got to our station at Cross'. Crocker kept his word and a copy of his Brean Down survey identical to that section of Hoare's map is pasted into Skinner's diary.

Determined to overcome obstacles presented by the farming calendar, Skinner returned to the area three months later: *'2 Nov.* My brother and myself left Camerton this morning with the intent of examining the Roman settlement at Uphill above the Axe, the Belgic enclosures at Bleadon, and the Roman camp and Barrows on Brean Down.' They travelled from Banwell via Locking, Hutton and Oldmixon to Uphill, where the procured lodgings near the little Inn. 'After an early dinner we proceeded along the Bleadon road to the site of the Roman station which I discovered last year when with Sir Richard Hoare. When digging in the soil, William and another man turned up several fragments of coarse British pottery, as well as Roman, and a piece of Samian and a large flat-headed nail. Having given directions to the man to examine farther, we returned to our quarters for the night, having engaged with Mr Richardson and his nephew to visit Brean Down tomorrow morning at eight o'clock'.

On Brean Down they dug four barrows, all of which had been previously examined and had their contents removed, and also dug into the corner of the enclosure above the Axe 'in expectation of finding something Roman but in this we were disappointed'. He remarked on the rock-cut well at the farm house. 'That the Romans occupied this side of the hill as well as the summit is evident from finding their pottery; indeed, we picked up another piece of Samian in a potato field as we returned'.

The next day was devoted to the examination of 'a very extensive Belgic and Roman settlement on Bleadon Hill', for which they 'procured a man and his son for guides who reside near the spot where I discovered so much Roman pottery when with Sir Richard Hoare last year'. The wife who had lived in the cottage many years and her father before her, retained the traditional story that there was a great battle fought and the invaders were defeated and had their boats cut adrift.

Whilst the men were digging a barrow to the south of the wall dividing Hutton and Bleadon, Skinner writes 'Mr Richardson and myself traced back the line of enclosures along the Southern side of the Hill under the Roman station, and thence returning we examined some black ground just ploughed up to the East of Pirn Hill, which lies about a quarter of a mile from Bleadon. In this ground we found both coarse British and Roman pottery, an evident indication that the habitations extended into the lower ground, as far as was not affected by the tide ... There was a branch of the Axe called Tyle Pill coming up close to the point of Purn Hill where Weston (now Ye Old Catherine Inn) is situate and in the memory of man, coal and commodities have been landed here by sloops ... On walking from Weston to Bleadon we noticed a stone causeway running across the flat to Bleadon Church'. He reported that there was a great deal of clearance of stones from wall enclosures on Littleton Hill, and an old man said they always came upon pottery. When widening the road they had found a pit with the skeleton of a four year old child in it. There was Roman pottery near the gate to the left of the road from Cross to Bleadon opening onto Littleton Hill.

On the other side of the road, 'men were employed in conveying away the stones they had recently broken up out of one of the enclosures.' Over these fields he found all kind of pottery and one piece of Samian and thick Cornish slate. There were enclosures to the summit, as far as Shiplate Combe, with some of the walls from 6 feet to 7 feet in height (2m) . On the question of the Roman road, Skinner persisted in his belief that it ran south of Uphill Hill on a line in front of the lawn of Mr Payne's house. Norman, the labourer, agreed with him pointing along the parish boundary. But he says, they found no pottery there!

Like a dog worrying a bone, Skinner returned again next year, 1820, on 21 July: 'After breakfast, Mr Crocker and myself, with the groom leading a horse for Sir Richard Hoare, proceeded to Bleadon in order to examine the prodigious Belgic remains in that neighbourhood. Sir Richard followed in a chaise ... On arriving at the spot, I procured a person to dig in the enclosures near the roadside at Littleton, for so the site of the remains is denominated, extending along a rocky knoll just above the village. We found directly grey and black pottery, fragments of roofing stones from Temple Cloud, also pieces of coarse slate employed for the same purpose, together with coarse unbaked pottery. We also noticed a grave lately laid open whilst quarrying stone.' Concerned about the enclosures, he writes 'I endeavoured to persuade Mr Crocker to mark in the several divisions'. At Uphill, Sir Richard returned in the chaise to Cross and Skinner adds 'Mr Leman has acquainted Sir Richard Hoare with the name of a settlement Ad Axium ... This seems to agree very well with this place but subsequent researches may greatly assist us in these researches.'

Hoare's great work was published the following year and Skinner apparently did not return to the area for six years. His visit in July 1826 is tinged with nostalgia. Staying with

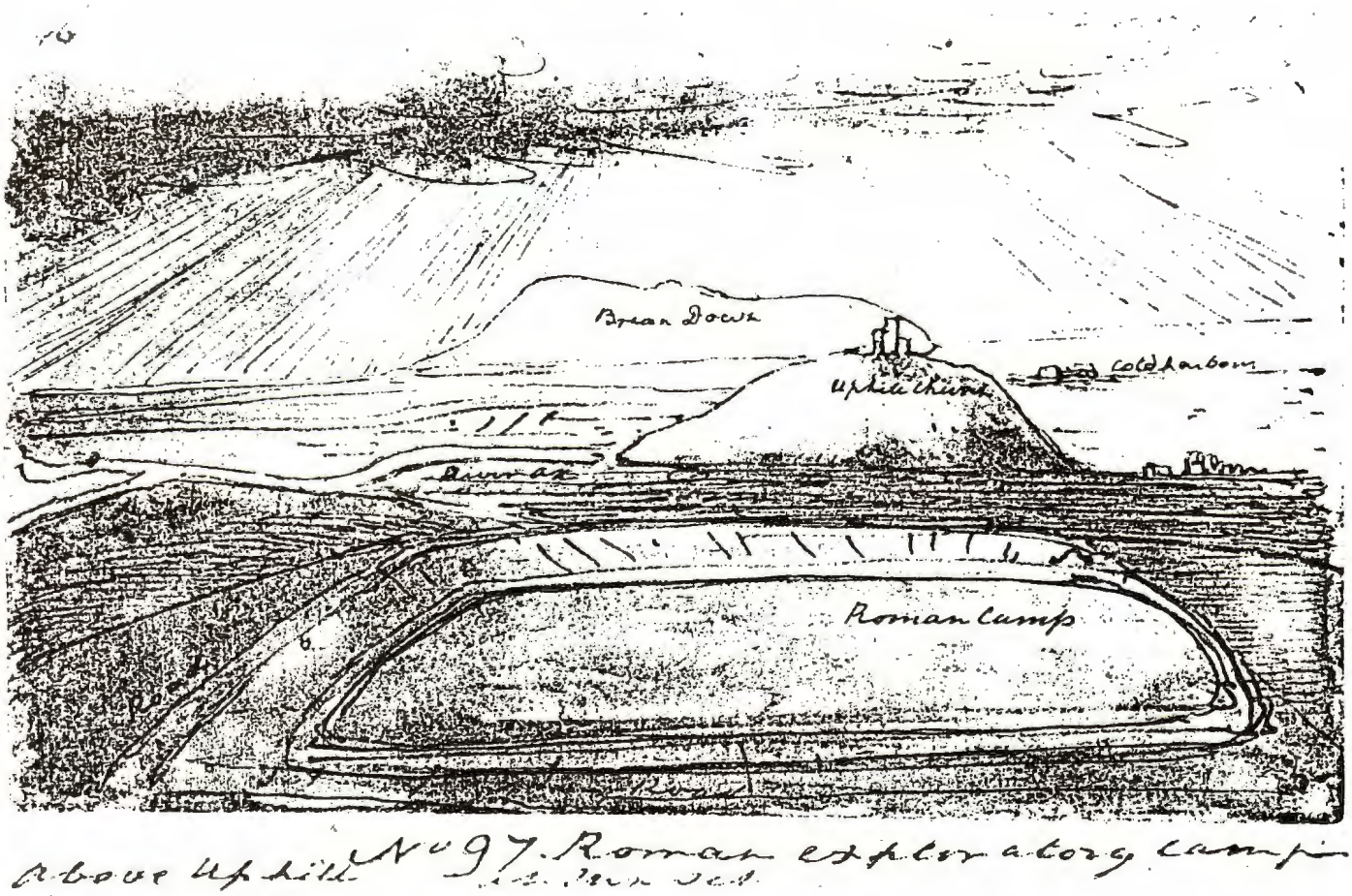

Fig 3 'Roman Exploratory Camp above Uphill, Somerset,' Sketched by the Revd Skinner July 1826. Sunset view looking west. Shows outlines of the camp with Uphill Church and Brean Down in distance, Coldharbour on right and River Axe and road on left. Road in foreground. Reproduced by courtesy of British Library (Add Mss 33692), f205, Crown Copyright reserved

the Richardsons at Totterdown House, he walked up the hill to Ad Axium and there witnessed a glorious sunset. His several sketches are suffused with colour. As usual, 'The interior of the camp is now under culture and has a crop on it. Nevertheless, it did not prevent our observations, I picked up several pieces of pottery and what appeared to me to be a tessera, which I gave to Richardson, but as this was not accompanied by others, it may probably be only a chance resemblance'. He checked the teazle field to the north for pottery but found none. They went into the house behind the camp to see some coins, but only one, a Constantius, was Roman. The man 'afterwards showed us a spot to the northwest of the camp where several bodies have been found'.

The lack of evidence of foundations is obviously a worry to him. One of his sketches is entitled 'Roman exploratory camp above Uphill', and he describes 'the camp' as 'fortified by the high bank thrown up in the midst of the British enclosures'. It is seen to be tucked into the right angle formed by two roads.

The next visit, in September 1829, adds little new information in the way of finds. With him this time are the Bishop of Bath and Wells and Capt St Clare. He showed them what he now terms the 'Roman Camp (I cannot term it a station) which I examined with Mr Richardson in 1826. The outer agger of the fort is very visible, being being 6 feet in height ...The person who resides at the Public House within the lines of the Roman work, has dug up two coins, one Constans, other Constantius, also several skeletons which might have been interred in later times'. Amongst their various explorations of the neighbourhood over the next few days they had a dig in the 'harbour' in Lynch Field under the termination of the ridge in Cod Close, where Skinner had noticed some earthworks, but nothing was found except bones of sheep and ox.

Thus over the years Skinner furnished several clues as to the location of Ad Axium. Also, by quoting from his manuscripts at some length, an indication is given of the very impressive nature of the extensive series of earthworks and walls covering the hills around Bleadon: even then they were being actively destroyed as an easy source of stone. Happily the remnants have at last been mapped in detail (see p 155).

The question now facing the two authors of this note was whether any traces could still be found of the earthwork called Ad Axium. One (CR) had scaled up Hoare's map and declared he knew the location, the other (JE), having examined Skinner's sketches and checked with the tithe map of Bleadon to find the public house, was equally confident. One cold Sunday in

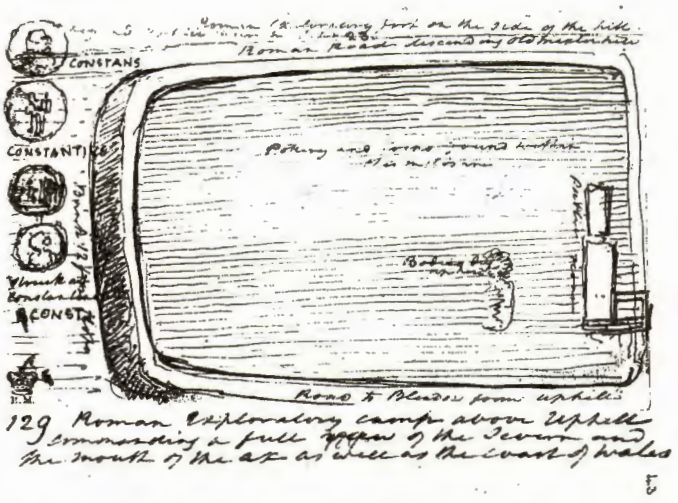

Fig 4 'Roman Exploratory Camp above Uphill,' Sketched by the Revd Skinner September 1829. Plan with north at top. Public House in south-east corner. Notes in interior read, 'Pottery and coins found within this enclosure', 'Bodies dug up here'. Western bank is described as 12ft from top. Skinner puts the Roman road descending Oldmixon Hill along the northern side. Also drawn is a coin of Constans and another of Constantius. Reproduced by courtesy of the British Library (Add Mss 33714, f43), Crown Copyright reserved.

December we met and, as Skinner himself might have said, going directly to the spot, we were amazed as a massive bank greeted our eyes. We had found the western bank of Skinner's Ad Axium! It runs at right angles from the road called Bleadon Hill (ST32925791) along the driveway of the house now called 'Elskar' (formerly Brean Croft) and survives as the garden boundary between 'Elskar' (on the outside) and 'Dundranach' (on the inside). At an estimate, the height now is some 2 metres. The southern boundary, alongside the road, consists of a slight bank, and nothing remains of the eastern boundary alongside Totterdown Lane. However, the northern boundary again appears as a boundary bank running between No 3. and a garage belonging to No 5,Totterdown Lane.

This bank continues on the opposite side of Totterdown Lane alongside 'Silverthorn' and on eastwards up the hill. It was interpreted on one of Skinner's sketches as the line of the Roman road, but it is likely to be no more than a field boundary which, lying at the crest of the hill, has been exaggerated by ploughing over the centuries. The earthwork called Ad Axium, measures some 170m by 80m and encloses a little over 3½ acres. It lies at a height of 60m halfway along a ridge which rises to 120m. The land slopes down to the north and to the west; it cannot be said that it commands the river Axe in any way. Uphill Church lies one mile due west and Uphill Grange is halfway between the Church and Ad Axium. No earthworks could be detected to the south side of the road which is fully built up with houses.

Recent recorded finds from what we now know as the interior of the earthwork have been confined to burials. The White Barns skeleton in Woodspring Museum was found in 1961 in a pipe trench in the road at the southwest corner of the enclosure. There is a verbal report (pers com Mr Ballam) of 'many skeletons' being found when the sewer trench to 'Dundranach' was dug in 1963 and this would be in the same spot that Skinner found burials. The present owner of White Barns, when questioned, said he had never found anything of interest. Subsequently extended, this was the public house referred to by Skinner in 1829 and on the Bleadon tithe map of 1843 it has the name New Inn. The surrounding field is called Chissell Acre and the old parish boundary with Uphill does a dog-leg to follow the west and northern banks of the earthwork. According to the owner of 'Dundranach' the northwest rounded corner is still clearly visible. Roman pottery, and part of a whetstone, have been found at intervals since 1941 from an area outside the northwest corner, in what was Uphill parish, in particular from the gardens of houses in Channel Heights in 1961. A silver denarius of Domitian came from 'Bleadon Hill' in 1957.

When Hoare published his map in 1821 the name AD AXIUM was written boldly above (ie west of) an earthwork which, although centring on Skinner's enclosure, extended over a larger area. So it seems strange that later authorities persistently misinterpreted his plan. Rutter (1829), writing only seven years later, virtually copied Hoare's description of the 'beautifully situated' earthworks sloping down to the river Axe. Yet he stated that the Roman station to which the Roman road had been traced by Hoare was on Uphill Hill.

Phelps (1836) is typical of most and interprets the field systems as the site of a British settlement, afterwards occupied by Romans, extending 'two miles in length from Uphill Field to Shiplate Wood in an amphitheatre, as it were of the hill and facing the south'.

The Revd. F. Warre (1849) puts Ad Axium on the site of the old Uphill Church. Later (1864), after his excavations on Worlebury, he usefully records the finding of early Roman coins at the east end of Brean Down and Woodspring Museum has a gold coin of Claudius which may have been his. Scarth (1859) confirms Hoare's description and says 'The Roman station is small but quite distinguishable', yet fails to say where it was. Jackson (1877) avoids the use of the name Ad Axium and confines his description to 'a considerable British settlement which slopes southwards between Pirn Hill and Bleadon. Here, more than a half century ago, was found a pot of golden ornaments, the memory of which is not yet extinct'.

Perhaps more convincing proof of occupation is found opposite the Anchor Inn on the west side of Purn Hill, once a sea-cliff ST33205705. Here quarrying in the 1920's exposed a section of Pleistocene breccia overlain by an upper sandy gravel. 'At the top of this upper gravel were domestic animal bones, edible mollusc shells and British (?) or Romano-British pottery'. (Palmer 1934).

The 1885 OS map, 25 inch to the mile, shows Ad Axium as lying immediately above (south) of Oldmixon Copse. It also marks the Roman road as running to the south of Uphill Grange and down a post-medieval mining groove on the south west side of Uphill Hill. Later editions do not attempt to draw in the line. Francis Knight (1902) puts 'the Roman guard station which once defended the little port' on the site of the old Uphill Church.

However, F. J. Haverfield (1906) is curtly dismissive of the Roman port and village and of the Roman road and says they 'lack evidence'. The best resume by far is given by Gough (1930). He is one of the few who, in his search for evidence of mining on Mendip, has read through Skinner's journals and, although noting his field observations relating to Ad Axium, he cautions the reader about Skinner's enthusiasm and imagination. He believes there probably was a road or early route running westward of Charterhouse to the sea, but that it had no direct association with the lead mines. He assumes the Romans would have had some sort of navigation going to and from Uphill across the Bristol Channel and says 'We cannot regard the Roman settlement and harbour as proved, though I confess to an inclination to believe in it.' He apparently interprets Hoare's Roman station as lying on Uphill Hill between the church and old windmill and yet in a subsequent footnote he comments that 'the OS map marks a Roman Camp on the slope above Bleadon *which may be the same as that Skinner refers to, but any inspection of the site is now impossible,* as it has become covered within the last few years with an outcrop of bungalows' (authors' italics). It is surprising that Tratman (1962) in his useful summary on Roman roads in North Somerset, ignores Gough and interprets Hoare's earthwork as 'near Uphill Grange' and introduces yet another line for the Roman road. This can probably be ascribed to the fact that he was given inadequate information regarding unpublished finds of Roman pottery in the gardens at Uphill Grange, and under the new Lodge. So far, it is this area which has produced more Romano-British material than anywhere else in Uphill. Apart from the hoard of Roman coins (Haverfield 1906 and Harrison 1977) found in a cave (1826 and 1846), there is very little else from the parish.

The precise route of the Roman road has not yet been identified although we would favour a line leading to the present day Uphill Way. The confusing earthworks on top of the hill may be elucidated in time, especially as it is now known that several are the work of the Home Guard in the last war, including the base of a circular structure or tower about 3m in diameter reported in *BAA* in 1982 (p 57).

What we do know now since Hoare's day, is that there was a Roman temple on Brean Down in the third century. In addition there was some sort of a Roman presence in the first century, with evidence of occupation of the Iron Age hill fort situated at the eastern end continuing into the Roman period (Burrow 1976). There would, of necessity, have been a small ferry across to the Down in Roman times, perhaps from the area known as Coldharbour. The name Coldharbour on the tithemap of 1843 refers to two fields now the southern part of the golf course. In earlier times the area so called may have extended south of Links Road. Over the centuries the mouth of the Axe has undoubtedly changed and Day and Masters ' map of 1782 shows the river swung closer to Brean Down in an area which is now saltings (Page 1982). This may have left a spit on the Uphill side, of which a remnant survived called Slimeridge Warth on the 1843 map. In addition, there was surely a wharf or small harbour for local coastal traffic, and this we would expect to be situated at the head of Uphill Pill, on the same site as the medieval and post-medieval harbour, and presumably, as occasion demanded, protected by a sea-wall.

AD AXIUM *(sic)* is finally found again, albeit a mile from the banks of the river Axe. But Roman Uphill remains a mystery, perhaps as Skinner observed, covered with sand, or mud.

REFERENCES

Burrow, I C G 1976 Brean Down Hillfort 1974 *Proc Univ Bristol Spelaeol Soc* 14 (2), 141 - 54

Elkington, H D H 1976 The Mendip Lead Industry, 194, in Branigan, K and Fowler, P J *The Roman West Country*

Gough, J W 1930 (reprinted 1967) *The Mines of Mendip,* 24, 41 – 46

Harrison, R A 1977 Uphill Quarry Caves, *Proc Univ Bristol Spelaeol Soc* 14 (3), 236

Haverfield, F J 1906 Romano-British Somerset, *VCH Somerset* I, 350, 368

Hoare, Sir Richard Colt 1821 *Ancient Wilts* Vol II Pt ii, Roman Era, 38-45, P1 III

Iles , R and Stacey M 1984 Avon Archaeology 1983 *BAA* 3.

Jackson, W. 1877 *Visitors' Handbook to Weston-super-Mare,* 241

Knight, F A 1902 *The Seaboard of Mendip,* 252

Page , H 1982 Saltings at Brean, *Proc Som Archaeol Nat His Soc* 126, 119-125

Palmer, L S 1934 Pleistocene Breccias near Severn Estuary, *Proc Geol Assoc* 45, 152

Phelps, W 1836 *The History and Antiquities of Somerset* I, 77, 109

Rutter, J 1829 *Delineations of North West Somerset,* 77-8, 83

Scarth, H M 1859 Barrow on the line of the Roman Road, *Archaeol Journ* 16, 146

Skinner, John Unpublished journals in British Library:-

Add Mss 33,651 June 1818, £60; Sketch f135 (No 28)

Add Mss 33,653 Aug 1819, f175-6; Sketches f207

Add Mss 33,651 June 1818, f60; Sketch f135 (No 28)

Add Mss 33,653 Aug 1819, f175-6; Sketches f207 (No 19), 208 (No 20)

Add Mss 33,654 Nov 1819 f111-18; Sketches f154 (No.20), 156

Add Mss 33,655 July 1820 f295; Sketches f306, 307

Add Mss 33,692 July 1826 f201, 207; Sketches f204, 205, 213, 215

Add Mss 33,714 Sep 1829 f40, 41, 68; Sketches f42 (No 128), f43 (No 129), f69 (No 145)

The folio numbers have been noted above for most of the written references to the subject covered and for the more useful of the sketches (photocopies of several are held at Woodspring Museum). Mr W Wedlake FSA, is working towards the publication of a comprehensive index of the entire Skinner Mss which will be an invaluable aid to the student. At present, references have to be located on somewhat of a 'lucky dip' basis.

Tratman, E K 1961-2 Ideas on Roman Roads in North Somerset, *Proc Univ Bristol Spelaeol Soc 9* (3), 162-3, 169-70

Warre, F 1849 *Proc Som Arch & Nat His Soc* 1, 86

1864 *Ibid* 12, 65-6

Woodspring Museum Records Accession nos 57/0342, 61/30, 57/0133, 57/0201, 58/0013

Maps (in Woodspring Museum unless otherwise stated)

1782 County of Somerset surveyed by Day and Masters

1843 Tithe map of Uphill , SRO

1843 Tithe map of Bleadon, SRO

1885 Ordnance Survey 25in to the mile Sheet XV1 8

A PETROLOGICAL STUDY OF SOME QUERNSTONES FROM THE BRISTOL REGION

C. Ingle

This study was undertaken to consider the feasibility of provenance studies of quernstones - petrological analysis of rock thin-sections enables more detailed ocmparisons of composition and texture of the rock used (Ingle 1982). In the case of artefacts of igneous rock, the source can often be determined with some precision, in some instances to individual quarries eg lava quems manufactured at the Niedermendig and Mayen quarries in the Eifel region of Germany. Most quernstones found on British sites are of clastic sedimentary rock-sandstones of varied grain size - which may exhibit greater lithological variation over their outcrop areas and be less characteristic of a single source area.

THE CLASSIFICATION OF SANDSTONES

The term 'sandstone' refers to clastic sedimentary rocks composed of grains on the size range 0.06 - 2mm. They may also contain a proportion of pebbles > .2mm - when they are referred to as pebbly (c 10-25% pebbles) or conglomeratic (c 25-50% pebbles) sandstone. (True conglomerates comprise > 50% pebbles with a finer grained matrix).

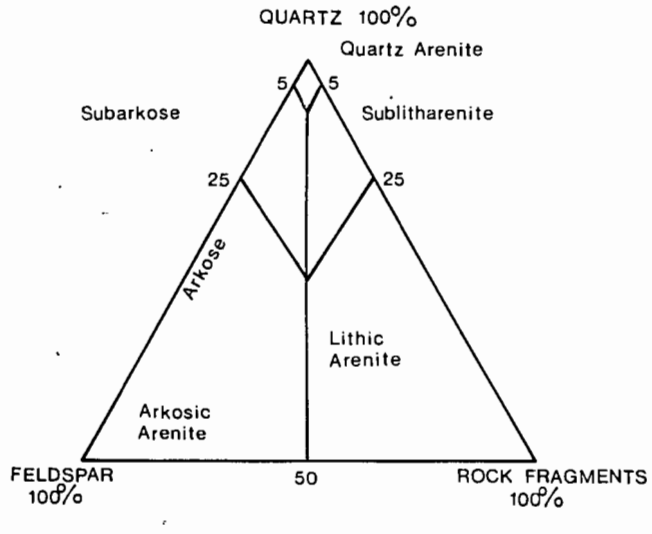

Fig. 1 Classification of arenites

Sandstones are classified on the basis of mineral content and textural attributes (eg grain shape, rounding, size distribution). Two main groups of sandstone are recognised - the arenites (< 15% finer grained matrix) and wackes (> 15% matrix) of which only the arenites are relevant to this study, all the querns and sandstones studied belonging to this group. The arenites are subdivided on the proportion of quartz feldspar and rock fragments as Fig 1.

Another distinguishing feature is the process of lithifications or diagenesis, by cementation and/or compaction.

1. Cementation - subsequent deposition of mineral (or minerals) between the grains - commonly silica, calcite, iron oxides. Silica is often deposited in optical continuity on host quartz grains - appearing as a clear overgrowth that may obscure the original grain outlines.
2. Compactional diagenesis - the grains are welded under pressure without cement - softer clasts (eg rock fragments) may be deformed into the interstices forming a pseudomatrix (similar in appearance to a matrix introduced after deposition).

During this study over 70 quernstones (mostly of Roman date) from sites in the Bristol Region, were used and their lithologies compared with those of samples collected from local sandstone outcrops (Fig 2). Nine samples and nine quernstones (from two sites) were thin-sectioned for a more detailed comparison.

Hence the type and variety of rock used, the source and accuracy with which this could be isolated, and the material used with regard to the date and type of quern could be considered.

Throughout the period of its use the design of the quern was evolved to increase the grinding efficiency. During the Roman period querns became flatter and larger with less steeply inclined grinding surfaces than Iron Age examples; and flat grooved grinding surfaces were also introduced.

All the querns studied had been manufactured from quarzitic (ie quartz-rich) sandstone of which there are five main sources in the region:

1 Old Red Sandstone (ORS)	Devonian
2 Cromhall Sandstone	Lower Carboniferous
3 Quartzitic Sandstone Group (QSG)	Middle Carboniferous
4 Pennant Sandstone	Upper Carboniferous
5 Triassic Sandstones	

The outcrops of these are shown in Fig 2. Within each of

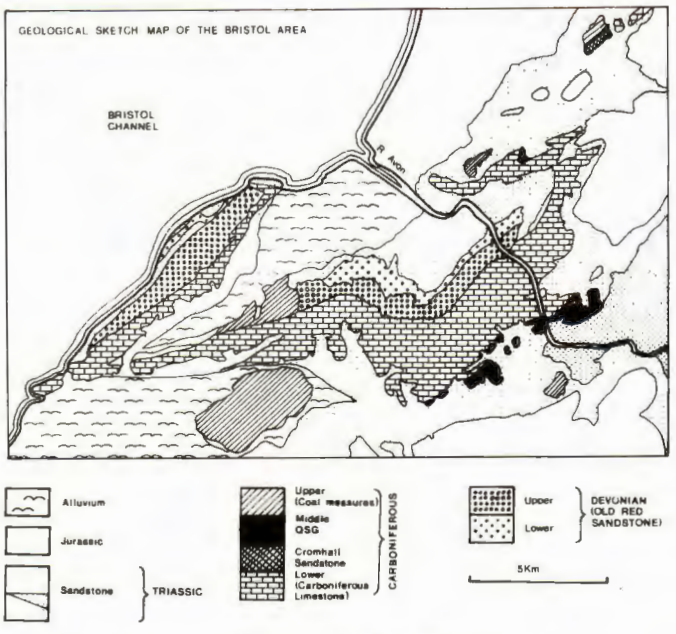

Fig. 2 Geological sketch map of the Bristol area

the five groups the rocks exhibit a number of common characteristics in their lithologies, but also show variations in composition, grain size and texture. The main lithological characteristics of each are given in Table 1.

Quernstones from the following sites were used:

Iron Age	Cadbury Camp, Tickenham
Roman	Gatcombe; Filwood Park; Chew Valley (Chew Park and Herriotts Bridge); Stoke Gifford; Sea Mills; Camerton; Nettleton.
Medieval	Chew Valley (St Cross Nunnery); St Mary Le Port, Bristol.

GATCOMBE

The 11 quernstones (3 upper) from this site were of pinkish grey to reddish brown quartzitic sandstone, fine - coarse grained sandstone to pebbly and conglomeratic sandstone. They comprise 75% - 95% quartz (from igneous and metamorphic source, poly-and monocrystalline), 5-25% rock fragments, a low percentage of opaques and minor amounts of feldspar. The grains are subangular to subrounded (rounding increasing with grain size), cemented by silica, and patchy iron oxide.

Five of the quernstones were thin sectioned, the result of petrological examination being given in Table 2. Thus the querns (3rd - 4th century in date) which range in size from 41.5 - 56cm diameter were made mainly from sandstones of sublitharenite type - typical of the Old Red Sandstone of the region. One (Q9) is of ferruginous quartz arenite - possibly Cromhall Sandstone which out crops on the ridge behind the site with Quartzitic Sandstone group rocks (which was not apparently used for querns found on the site).

FILWOOD PARK

The four quernstones from Filwood Park were all thin-sectioned (see Table 3). A number of other stone objects from the site were also thin sectioned. ST 1, a mortar was very similar to ST 2, and probably from the same source. ST 7, a quern rubber was of quartz arenite (similar to ST6), and ST 8 (whetstone) is of Pennant Sandstone.

Thus three types of rock were used for the four quernstones from this site - sublitharenite of Upper Old Red Sandstone type, quartz arenite of Quartzitic Sandstone Group and ferruginous quartz arenite (similar to Q9 from Gatcombe) – possibly Cromhall Sandstone. The nearest available sandstone is Triassic.

TABLE 1

OLD RED SANDSTONE

LOWER – BLACKNORE SANDSTONE
Sandstone and pebbly sandstone with subordinate conglomerate. Subangular to subrounded grains> 75% quartz (igneous or metamorphic source) 15 - 25% rock fragments (micaceous and ferruginous siltstone, intraformational siltstone).
Iron oxide staining. Well-rounded pebbles of quartz. Light to dark red, light greenish grey in colour. Calcite cement.
Submature to mature sublitharenite.

MIDDLE – WOODHILL BAY CONGLOMERATE
75 - 80% quartz - poly - and mono-crystalline. Well rounded pebbles of quartz, jasper lithic sandstone, quartz and mica schist, siltstones. Coarse grained sand matrix, subangular to sub-rounded grains.
c 5% iron oxides. Calcite cement
Polymictic conglomerate - sublitharenite.

UPPER – PORTISHEAD BEDS
Siltstones - pebbly sandstones. Sub - to well rounded> 75% quartz (igneous or metamorphic source - many pink veined) with numerous inclusions of chlorite, apatite, cavities. Silica overgrowths 20% rock fragments (green or red, micaceous ferruginous siltstones, chert, fine grained quartzitic sandstone). Finer grained deposits contain more mica (muscovite) and feldspar (dominantly microcline,) Ferruginous grains and grain coatings. Silica cement, compational diagenesis. Colour varied - grey to reddish grey.
Sublitharenites.

CARBONIFEROUS

LOWER – CROMHALL SANDSTONES
Occur within the Carboniferous Limestone series and include quartzitic sandstones, siltstones and sandy limestones. Impure quartz sandstones with subangular to subrounded quartz grains, fine grained quartzite, chert. Calcite matrix (often decalcified) Hemetization.

MIDDLE – QUARTZITIC SANDSTONE GROUP (millstone grit series)
Pure quartzites, conglomerates and chert. >95% quartz (monocrystalline from igneous source with inclusions and silica overgrowths). 3 - 4% rock fragments (quartz schist, chert) moderate to well rounded.
Silica cement.
Locally know as Brandon Hill Grit - pale grey - pinkish quartz - arenites.

UPPER – PENNANT SERIES
Sandstones and grits:- lie between the upper and lower coal measures
50% rock fragments (dominantly mica schist).
45 - 50% quartz.
Immature lithic arenites.

TRIASSIC

TRIASSIC – SANDSTONES
Well sorted sandstones of variable composition - quartz (of metamorphic or igneous source with inclusions), limestone, sandy marl, iron oxides (eg goethite). Rounding moderate to good.
Calcite cement.

TABLE 2. GATCOMBE QUERNS - THIN SECTION ANALYSIS

Quern No.	Diameter/ Thickness/ Grinding Surface	Grain Size/ Rounding/ Colour	Quartz	Rock Fragments	Feldspar Mica	Iron Oxide	Other Features	Rock Type/ Comparisons
Q 7	53 cm 7 cm grooved	pebbly to medium grained	c. 80% quartz (poly - and mono-crystalline) with inclusions and silica overgrowth	10 - 15% micaceous quartzitic siltstone	Minor feldspar (dominantly microcline) muscovite	1 – 2% iron oxides	compactional diagenesis	sublitharenite Portishead Beds - Failand Ridge
Q 8	40 cm 8.75 cm grooved	medium grained	>80% dominantly monocrystallines with silica overgrowths and inclusions (eg Chlorite).	10 - 15% ferruginous siltstone	rare mica - bent muscovite flakes		Deformed rock fragments form pseudomatrix	Sublitharenite Portishead Beds - Failand Ridge, Portishead
Q 10	53 cm 4 cm grooved	pebbly. Coarse grained moderate rounding	>75% with numerous inclusions silica overgrowth	15 - 20% siliceous siltstone, chert	small muscovite grains	small opaque grains and grain coatings	Compactional diagenesis	Sublitharenite Q 8 Portishead Beds, Failand Ridge.
Q 11	48 cm 10.5cm	pebbly, medium to coarse grained moderate to well rounded	>80% poly - crystalline quartz pebbles smaller mono-crystalline grains,inclusions eg chlorite, cavities	c 15% ferruginous quartzitic siltstone forming pseudo-matrix	small mica grains. Rare feldspar	Hemetite grain coatings	Compactional diagenesis	Sublitharenite Q 10
Q 9	38 cm 8 cm grooved	medium to coarse-grained sub-to well rounded, orangey brown in colour	95% dominantly monocrystalline with few inclusions, silica overgrowths	low % of siliceous ferruginous siltstones		4% grain coating and cement	silica cement	Ferruginous quartz arenite

CHEW VALLEY

The eleven querns from Chew Park ranged in size from 34 - 46cm in diameter, and 5 - 8.5cm in thickness. They are all of Old Red Sandstone from the Mendips fine-coarse sandstone to conglomeratic sandstone, pale grey and pinkish grey to reddish brown in colour. Like the Portishead Beds of Bristol these rocks are sublitharenite with 75 - 90% quartz, 10 - 20% rock fragments, and iron oxides present mainly as grain coatings.

The seven from Herriotts Bridge (35 - 43cm diameter) are also sublitharenite similar to the Chew Park Querns. The three Medieval examples from St Cross Nunnery are smaller (30 - 34cm diameter, 5.5 - 7.5cm thick) but again are medium to coarse grained and pebbly sublitharenite pinkish grey in colour and from the same source.

Similar lithologies were found with the other quernstones from Bristol. Those of Iron Age date from Cadbury Camp, Tickenham are of medium to coarse grained sublitharenite (probably Upper ORS which out crops along the Portishead - Clevedon and Failand Ridge) as are those from Sea Mills. The two fragments from Stoke Gifford are more conglomeratic with a coarse grained matrix, and well rounded clasts of vein quartz, jasper and grey/green - reddish brown siltstone - similar to the medieval querns from St Mary le Port, Bristol.

CAMERTON AND NETTLETON

The quernstones from both of these sites were of grey to dark grey sublitharenite to quartz arenite - fine to coarse grained and pebbly with subrounded to well-rounded grains of quartz and siltstone. They are overall finer grained than the Bristol examples and contain less iron-oxide.

CONCLUSIONS

From the above results it appears that the composition of any particular sandstone was more relevant than grain size - although few were of either fine grained sandstone or true conglomerate. Most of the quernstones were made from sublitharenite - the rest from quartz arenite (or, rarely lithic arenite - for which the main sources are the Upper Old Red Sandstone and Quartzitic Sandstone Group outcrops.

These rocks exhibit both lateral and vertical variations in composition and grain size over their outcrops - with gradation between the two groups (intermediate samples having *c* 90 - 95% quartz, 5 - 10% rock fragments). In the coarse grades the main constituents of each are the same making identification of some samples difficult - although in the finer grades the presence of mica (muscovite) and feldspar (dominantly micro-cline) in the Upper ORS enables it to be distinguished from the QSC where these minerals are generally absent. In general

TABLE 3 FILWOOD PARK - THIN SECTION ANALYSIS

Quern No	Diameter/ Thickness/ Grinding/ Surface	Grain Size/ Rounding/ Colour/	Quartz	Rock Fragments	Feldspar Mica	Iron Oxide	Other Features	Rock Type/ Comparisons
ST 2	38 cm 6 cm smooth	pebbly to conglomeratic sandstone with medium to coarse grained matrix	80 - 90% pebbles of pink veined quartz - poly crystalline smaller monocrystalline grains with inclusions (eg chlorite) and silica overgrowths	10 - 15% reddish brown micaceous ferruginous siltstone minor chert	low % mica (muscovite)	partial hemetite coatings	Compactional diagenesis	Sublitharenite Q10, Q8, Q7 Portishead Beds - from Failand Ridge.
ST 3	35 cm 8.85 cm smooth	medium grained pinkish grey	85% dominantly monocrystalline (with inclusions silica overgrowths) igneous source	c 10% micaceous siltstone and schist	minor amounts of small muscovite grains	virtaully absent	Compactional diagenesis	Sublitharenite Portishead Beds from Failand Ridge
ST 4,5	40 cm 11 cm smooth	pebbly, fine to medium grained pinkish grey moderate to well rounded grains	>95% - mono crystalline silica overgrowths over ferruginous coatings	minor ferruginous siliceous siltstones	virtually absent	4 - 5% as grain coatings	Silica cement patchy iron oxide	Ferruginous quartz arenite Q9 - but finer grained
ST 6	42 cm 8 cm smooth	medium grained pale grey sub rounded grains	>95% monocrystalline (igneous source) and some polycrystalline (metamorphic source).	small amount of micaceous silstone quartzite and chert	Scattered tiny muscovite grains	Little-partial coatings on some quartz grains	interlocking mosaic appearance	Quartz arenite Quartzitic sandstone Group - Long Ashton.

there is more iron oxide in the Upper ORS but this is variable eg due to hemetization of some of the carboniferous sandstones.

The problem is not confined to identifying a particular outcrop within the immediate Bristol area - Upper ORS also crops out on the Mendips, to the north it reappears at the northern edge of the Bristol Coalfield and it passes laterally into the

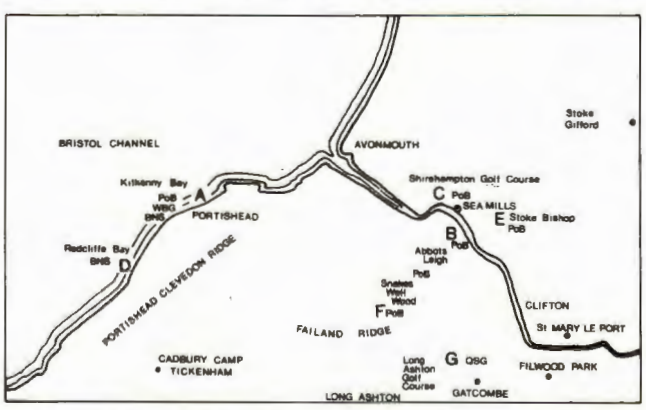

Fig. 3 Map of Bristol area with sites where querns found. A - G indicate localities where rock samples were collected. POB–Portishead Beds. BNS–Black Nore Sandstone. WBG–Woodhill Bay Conglomerate. QSG–Quartzitic Sandstone Group.

Quartz Conglomerate and Tintern Sandstone of the Forest of Dean. The Quartz Conglomerate is generally more conglomeratic than the Portishead Beds but of similar lithology having been laid down within the same depositional province. Thus it is difficult to prove from which part of this wide area any particular stone originated – the Quartz Conglomerate is virtually indistinguishable from the more pebbly and conglomeratic bands of the Portishead Beds (and in turn finer grained bands occur within the Quartz Conglomerate). It is only possible to suggest the more likely source on the basis of supporting evidence eg. trade patterns of other items.

The results did not show any systematic variation in lithology with quern size type or date - suggesting the continued us use of a source over a period of time during which a number of improvements were made to the design of a quern to increase the grinding efficiency. The most suitable locally available materials were recognised early on and continued to be exploited. More recent quernstone quarrying and production has been documented by Tucker (Penallt, Gwent) and Pitt-Rivers (Penselwood, Somerset) indicating the local nature of such operations with areas of quarrying distributed over a fairly wide area. It is likely that a similar situation existed in Roman times - that querns were made to satisfy a local market using a nearby outcrop (hence the variety of rock types used) and quarrying was conducted in the form of a relatively large number of small workings fairly widely

distributed. Some particularly suitable rock types eg the Hertfordshire Pudding Stone would have been exploited further, the products having a wider distribution.

From this limited study a number of conclusions can be drawn:

1 All of the quernstones considered were made of stone available locally – within 10 km.
2 This stone was dominantly sandstone of sublitharenite type with quartz arenite and lithic arenite also used.
3 The most commonly used source was the upper ORS (the Portishead Beds in the Bristol area). The lateral and vertical variations in composition and texture of these beds are sufficient to account for all of the variations in lithology of quernstones from the same site and of sublitharenite type.
4 It would be difficult to isolate any particular outcrop as a source for an individual quern or group of querns.
5 The Upper ORS of Bristol, Mendip and the Forest of Dean are all of similar lithology and hence must have similar grinding characteristics. It is logical to assume therefore tha that the nearest outcrop would have been used - although certain more restricted beds may have proved more suitable and attained a wider distribution.
6 Lesser amounts of Carboniferous sandstones - from the QSG and Cromhall Sandstone were also used eg. Gatcombe and Filwood Park, and is found at sites where upper ORS was also used.
7 The lithology of rock used, and hence its source didn't vary with time or design of the quern.
8 The abundant calcerous sandstones of the region (eg Lower ORS, Triassic Sandstones) were not used - probably due to inferior grinding characteristics.

Further research using a larger data base is required to modify or confirm these ideas which were based on a limited a amount of data and restricted period of study.

ACKNOWLEDGEMENTS

I would like to thank Mr R G Williams (Filwood Park) Dr A J Parker (Stoke Gifford) and the City of Bristol Museum and Art Gallery for the loan of the quernstones; and the University of Bristol Department of Geology for the use of material held in the Teaching Collections.

BIBLIOGRAPHY

ALLEN, J R 1965, *Upper Old Red Sandstone (Farlovian) Palaeogoegraphy in South Wales and the Welsh Borderland. J Sed Pet,* 35, 167-195

CRAWFORD, O et al 1955; The Quern Quarries of Mayen in the Eifel, *Antiquity,* 29, 68-76

CURWEN, C 1937, Querns, *Antiquity,* 11, 133-151
1941, More about querns, *Antiquity,* 14, 15-32

GREENSMITH, J T 1979, *Petrology of the Sedimentary Rocks*

GEOLOGICAL SURVEY *One inch Bristol District Map*

INGLE, C J 1982, *A petrological study of some quernstones from the Bristol region* (Unpublished BA thesis, Bristol University)

KELLAWAY, G 1967, The Geological Survey Ashton Park Borehole and its bearing on the geology of the Bristol District, *Bull Geol Surv Gt Brit,* 27, 49-153

KELLAWAY, G & WELCH, F 1955, The Upper Old Red Sandstone and Lower Carboniferous Rocks of Bristol and the Mendips compared with those of Chepstow and the Forest of Dean, *Bull Geol Surv Gt Brit,* 9, 1-21

OLLIER, C 1954, The Triassic Sandstones of the Bristol Region, *Proc Bristol Nat Soc,* 29, 57-70

PITTS-RIVERS, A 1884, *Report on the excavations at Pen Pits near Penselwood Somerset.*

RAHTZ, P and GREENFIELD, E 1977, *Excavations at Chew Valley Lake*

TUCKER, D G 1971, Millstone Making at Penallt, *Ind Arch,* 8, 229-239

WALLIS, F.S 1927, The Old Red Sandstone of the Bristol District *Quart Journ Geol Soc Lond,* 83, 760-789

WISDOM, L 1981, *A petrological typological and distribution study of quernstones quarried from the Quartz Conglomerate of the Forest of Dean* (unpublished BA thesis)

SOME POSSIBLE QUERN QUARRIES IN THE BRISTOL AREA - A PRELIMINARY SURVEY

P. M. Barford

This paper details the results of a field survey of exposures of two groups of rocks known to have been the sources of Iron Age and Roman types of quernstones and identifies a number of possible quern quarries which might be of this date. The writer became interested in the problem of quernstone sources in the Avon area as a result of the post excavation work on the Romano-British site at Marshfield [1]; the quern fragments from the site had been examined by a geologist, Mr. J. S. Branfoot B.Sc., who had identified the rock type used in each case. There were apparently two groups of stone; which between them accounted for most of the Marshfield querns; a quartzite (probably carboniferous) and a conglomerate (probably the Devonian Portishead conglomerate). Work on querns from a number of sites in the area by Caroline Ingle (Ingle 1982) confirms this pattern. A glance at the geological map (drift) demonstrated that these rocks effectively have very limited exposures in the area to the west of Bristol. It was decided to examine the ground over the entire area of these outcrops in an attempt to locate any quarries in these outcrops which might have produced these querns. A search of the Avon Sites and Monuments Record had previously failed to find any quarries over the relevant exposures, but this probably reflected the scope and aims of previous fieldwork.

Some of the outcrops had been built over (some quite recently) but those that were not were often covered in woodland conifer plantations or groves (and a study of the nature of the ground soon revealed why this was so) through which footpaths often ran; while others, notably a group in Ashton Court Park and Abbots Leigh Woods, were in land to which the public had access. This facilitated fieldwork, but also makes the absence of previous comment on the quarries that were found in this survey puzzling. Many of the outcrops had indeed been quarried to a greater or lesser extent. While some if not most of this quarrying was due to the extraction of building stone, it now seems probable that some were caused by, or initiated by, the extraction of stone for the manufacture of querns. The Marshfield querns of these two rock sources were Roman and Pre-Roman in date, but as yet the petrology of few post Roman querns has been studied in this area, and their source is as yet unknown (although two medieval querns from Bristol were of Devonian conglomerate, Ingle 1982). It is suggested that the possible quern quarries noted here may be considered to be perhaps Roman or of earlier date.

The Marshfield querns of the quartzite were saddle querns, which may be assumed to be pre-Roman; and an early type of a rotary quern (fig 00) which may be late Iron Age or early Roman in date. The querns at Marshfield of Portishead conglomerate were of Roman types. This was the commonest of the various rock types represented by the querns from this site, which appears to have been most intensively occupied in the fourth century AD.

In the following, descriptions of each outcrop are accompanied by grid references; all of the outcrops are shown on Fig 2 with the quarried areas blacked-in and omitting other geology. This should be studied with a geological map (eg. the Geological Survey 1:50,000 sheet 264. Solid and Drift; and the six inch sheets ST 57SE and SW and adjacent sheets) as well as an Ordnance Survey map for the topography (other quarries in this area are not discussed here, apart from building stone there are iron and lead ores which have been exploited (in antiquity ?) but are not shown on Fig 2.).

QUARRIES IN THE QUARTZITE

The first outcrops searched for quarries were those of the quartzitic facies of the Brandon Hill grit (representative of the carboniferous millstone grit series). These occur as small isolated exposures along the south side of the Failand (the south side of an east-west anticline). The stone is a fine grained, grey to light brown, very hard quartzite. The exposures run in a line from just under the east wall of the enclosure of Gatcombe through Long Ashton parish to Bristol University (Fig 1).

There was no sign of quarrying in the first two exposures (ST 528698 and ST 531701) but the first was overlain by a series of earthworks just to the east of Gatcombe (not mentioned in Branigan 1977 but comprising low platforms or banks and a probable hollow-way). The next two exposures were built over (ST 541705 and ST 543706) but fairly recently. It is possible that something may show up on aerial photographs. The southern part of the next outcrop (no 5) (ST 547696) is likewise built-up, but the northern half of the same exposure (ST 545710) shows definite signs of quarrying, one pit is shown on the 6" OS map. The site lies in rough ground to the south of the golf course at Long Ashton and at the time of my first visit was under bracken up to 0·8m tall so it was not possible to determine the full extent or disposition of the quarries. A few possible waste flakes were visible, scattered in the peaty topsoil, while a possible quern roughout was built into a tumbled drystone wall to the south of the footpath leading to this area from Long Ashton. An exposure of the rock in the sides of a quarry showed that at this point the quartzite was not heavily jointed and could have been extracted as sizeable blocks.

The next exposure along (no 6) is in a rhododendron clump in Ashton Court Park (ST 551715). At the north-west end of the outcrop the rock is badly jointed and splintered at the surface, but at the southern end on the east side of the steep-sided hill the rock had been extracted in the form of large blocks. The ground in this area is extensively disturbed by quarries, some at least of which are flanked by heaps of waste flakes from the shaping of stone. At the foot of the slope lay two flaked rocks, one a possible quern rough out, the other a little more convincing (it is hoped

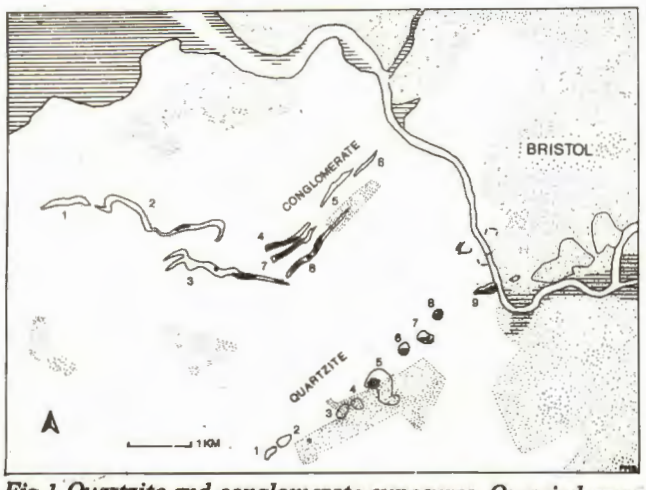

Fig 1 Quartzite and conglomerate exposures. Quarried areas -black; alluvium-lines; built up-stippled.

that arrangements can be made to deposit these in Bristol City Museum). It is likely that some at least of these quarries were exploited for the production of querns. The two 'roughouts' seen were both probably intended for the lower stones of rotary querns (as the finished example from Marshfield Fig 1).

One of the quarries has a series of grooves worn into the quartzite on the edge of the depression by the sharpening of (metal) tools in one place for a period of time. It would not be surprising to find upon excavation a hearth or even a temporary shelter site nearby to account for the return to the same spot over a period of time. These grooves need not of course be contemporary with the first digging of these quarries.

If these features, in part at least, are indeed quern quarries of late Iron Age or early Roman date then it is imperative that they are properly surveyed and recorded before they are damaged any further by human, animal or tree root activity. Already several hollows have been partially filled with tree stumps and other debris, the heaps of waste flakes have been recently disturbed and scattered and the two 'quern roughouts' clearly have been deposited at the foot of the slope quite recently. Also it would be useful to excavate the bottoms and surrounds of one or two selected quarries and adjacent waste flake heaps. It is perhaps unlikely that any datable artefacts would be found in stratified positions, but it may be worth excavating in advance of further disturbance.

The seventh outcrop (ST 554716) is also in two groves in Ashton Court Park. The area around the south edge of the grove has a number of shallow depressions with scattered possible waste flakes. North of an east west ride through the woods, however, an exposure of quartzitic sandstone of the carboniferous Hotwells group is extensively quarried. Some of these quarries are large, steep-sided and obviously of relatively recent (again, now being deliberately backfilled) but others are shallower and there is at least one heap of waste flakes in the area of these. These are possible contemporary with the quarries in the adjacent Brandon Hill quartzite.

The next outcrop along (ST 556712) is also in a plantation on a slight rise. The fringes of the slope within the wooded area are quarried, except on the west side. These quarries are not all in the Brandon Hill quartzite, but some are in the Upper Cromhall sandstone of the Hotwells group. There are a number of other earthworks in this grove, including a large linear feature of uncertain date. The relationship of this complex and all the other quarries to the ancient field system known to exist in this park (Phillips 1933) needs investigation. Fortunately R Iles is at present re-surveying these earthworks at a larger scale than the 1933 work. A preliminary search by the writer suggests that many of the visible earthworks stop short soon before or soon after crossing the present boundary of the woodland and thus no physical relationship with the quarries need be expected and indeed the nature of the ground within. Often steeply sloping with shallow (acid ?) soil and large quartzite boulders suggests that it is unlikely that this land was farmed in antiquity, and probably it has always been marginal land perhaps supporting tree cover, then as now.

The ninth outcrop is also covered in woodland (ST 565714); this contains a large linear earthwork apparently with a bank of upcast on the uphill side. It is not clear what this earthwork is. It could be a linear quarry - perhaps partly relatively recent,although maybe of earlier origin (the boundary wall of Ashton Court below this quarry on Rownham Hill is virtually all of this stone in contrast to the old boundary wall alongside the B3128 on the south side of the park, this wall in itself being worth a close study). Alternatively the upcast bank may suggest that this linear feature is part of the defences of nearby Burgh Walls Camp (the southernmost of the three forts on Fig 2 now destroyed by housing and the approaches to Clifton Suspension Bridge). Perhaps the feature is a combination of these alternatives.

The last three outcrops lie under the east side of Bristol at Hotwells (ST 575717) Cabot Tower (ST 579720) and the University (ST 583723). Although these are now built over or otherwise damaged,certain hollows in the Cabot Tower area probably originated as quarries, but in their present form these are perhaps more likely to have been for the extraction of stone for builings in Bristol than for querns.

Before turning our attention to the quarries in the exposures of Portishead conglomerate it may be worth considering a few points raised by the Long Ashton quarries. The stone from at least one of these outcrops had already been shown, by both Mr Branfoot's work and by Ingle (1982 and forthcoming), to have been exploited in antiquity for the production of querns. The stone for these querns must have been quarried from somewhere in the area examined. This survey suggests that probable quern quarries did exist in the area of Long Ashton Golf Course, and in the southern part of Ashton Court Park while the other outcrops not now available for study may also have been similarly exploited. It is surprising that these quarries had not been noted before, the main reason for this is probably the lack of petrological work (until recently) on local quernstones. Now these industries have been recognised, it is hoped that a closer study will be made of the typology and distribution of querns of these rock types. The stones from Marshfield demonstrate that querns of the quartzite travelled at least 25km from their source.

The waste flakes and roughouts from three quarries suggests that querns were roughly-shaped at the quarry site by flaking. The querns were finished by 'pecking' as can be seen on the lower stone from Marshfield (fig 1) where

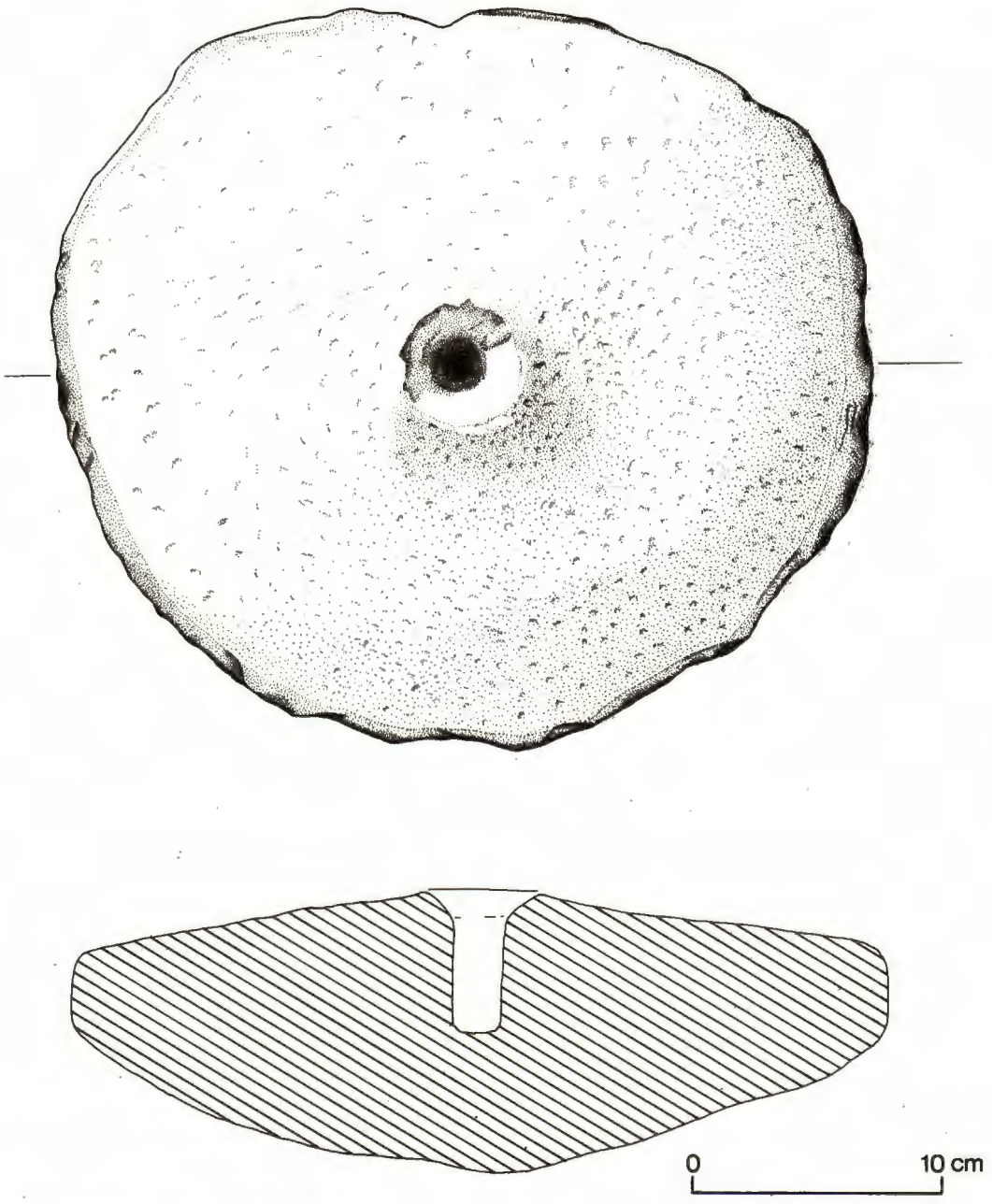

Fig 2 Lower stone of quartzite rotary quern, Marshfield.

the sloping grinding surface (now worn) had been pecked all over[2] the central spindle hole had been ground (perhaps after pecking out) but the rest of the stone had been roughly shaped only by flaking without subsequent retouch.

Admittedly there is something rather subjective in calling a large block of worked quartzite flaked to a roughly circular shape with a flattish upper surface and hemispherical lower surface a 'quern rough-out' but there is no reason to suppose they are not. It seems a curious shape to make stone blocks destined to be used in building, besides which the flakes of quartizite mortared into many of the quartzite walls in the area suggests that any dressing of quartzite blocks for building which did take place would have been done on site when the position of each block in the wall had been decided. The piles of waste flakes by the quarries at Long Ashton thus probably represent some activity other than the production of building stone.

It is not know how 'finished' the querns would have been when they left the quarry site (the rough-outs from Long Ashton show no pecking). Querns may have been pecked, ground, fitted with spindles, rhynds and handles at some other place, but it may be assumed that querns were sold fully finished.

Not all of the outcrops would be suitable for quern production. The rock would have to be jointed so that pieces could readily be detached but not so jointed that blocks once detached were too small to make querns from. An average quern would probably require two blocks *c* 0.4 X 0.4 X 0.2m in size, probably larger to allow for wastage in flaking.

QUARRIES IN THE CONGLOMERATE

The search for quern quarries in the conglomerates in the Portishead beds produced a number of problems. This rather attractive stone (hard red and sandy with various pebbles, often milky white quartz) has evidently been much sought after as a semi-decorative building stone, as numerous boundary walls in the area and walls of local buildings demonstrate. Thus any early quarries might have been obliterated by later quarries for building stone. Secondly, this stone does not flake easily and probably most of the querns were shaped mainly by pecking, which would not produce recognisable debris (at least in terms of this survey)

As may be seen from Fig 1, the exposures of the conglomerate facies of the Portishead beds are more widely spread and more complex than those of the quartzite. There are at least three sets of these beds which occur mainly to the southeast of the axis of the east-west anticline, the south side of which forms the Failand ridge. The outcrop extends from near the Downs School, Wraxall, through Lower Failand and Abbots Leigh, to Leigh Woods. There is also an outcrop of the (Woodhill) conglomerate on the shore in Kilkenny Bay, Portishead (ST 457 768) not examined in this survey, neither were conglomerate beds in Devonian strata exposed in the centre of the anticlines in the Mendips[3]. Conglomerate facies also occur in equivalent strata north of the Severn in the Forest of Dean area.

There are no visible quarries in the two western outcrops (ST 495 742 and ST 507 742) much of which are at present in woodland. There is however a slight linear feature below Lower Failand church (ST 514 736) which may perhaps be a quarry. The church walls contain random dressed conglomerate blocks. To the east of this the outcrop is followed by the road, and where they cross the pebble beds are seen in section in the edge of the road cutting. The conglomerate facies at this point consists of a very sandy stone with thin pebble beds, not thick enough to produce conglomerate querns from. The beds described above are from the 'middle' of the three sets of conglomerate beds in this area (Fig 1).

The third outcrop is the most extensive (it is part of the 'upper' set of beds); there is a broad exposure at ST 516 730 just south of Failand House. However there are no quarries here or in the pastureland or woodland to the east.

In the woodland near Ox House Bottom by the stream at the foot of the hill there are slight traces of quarrying, but this is probably connected with the construction of a drystone wall (now tumbled) which runs around this part of the wood[4]. Across the stream no quarries are visible in the woodland on the slopes of the valley, but a large linear feature (ST 504 727) begins on the edge of the wood. This was probably a quarry, and is now a field boundary. To the north of this quarry are the tumbled remains of a field wall, and since this and other field walls in this area were constructed partly of conglomerate blocks it seems that most of this quarry was excavated for building stone for these walls. The triangular copse to the east (ST 526 727) was impenetrable, but possible quarries may exist on the west edge. To the east of this a plantation runs along the outcrop, within which is a shallow linear feature (ST 527 727), but this time without field walls nearby. Two pits exist to the east of the plantation (ST 529 536). The origin and dates of all these quarries are unknown, but they are probably fairly recent, though they may obliterate earlier excavations. If however, the earlier quarries were quern quarries one might expect waste stone blocks to be lying around which may be used for field wall construction without the need for much further quarrying.

Three sets of conglomerate beds occur in the area of the woods around Abbots Pool and Glen Farm, Abbots Leigh (fig 1). The lowest conglomerate beds at the base of the Portishead beds outcrop (No 4) north of the Failand road (ST 533 733) and behind Glen Farm. These are followed by a linear quarry behind a high boundary wall containing many conglomerate blocks. These beds continue (No 5 - ST 541 741) after a gap to the north-east of the A 369 at the bottom of a valley. There are possible traces of shallow linear quarries at the north end. Just to the north-east of this is the most northeasterly outcrop (No 6) in this area (ST 545 744) this appears to be of the 'middle' set of beds. This shows possible shallow traces of quarrying at the southern end.

Returning once more to the Abbots Pool area there remain two more outcrops to consider: the 'middle' set of beds (No 7) had not been quarried on the east side of the valley but on the west side a linear quarry runs round the contours of the hill (ST 535 733) into a circular plantation (ST 533 731) where the feature breaks up into a complex of irregular hollows with many large conglomerate blocks lying on the surface, but no flakes or other worked stones were noted.

The 'upper' set of beds (No 8) runs round the top of the valley slopes above Abbots Pool. The northeastern end of the outcrop lies under the main street through Abbots Leigh village. Almost as soon as it enters the wooded area a considerable portion of the outcrop has been quarried away to the east by a large linear quarry (ST 537 732) (which could easily be mistaken for an ancient enclosure ditch around the woodland). Some blocks of conglomerate are lying in and below this quarry. Just to the south of this is at least one deep steep-sided quarry (ST 538 731)[5]. Just to the west of the farm track is a similar quarry. The outcrop continues to the southwest along a conifer plantation, in the middle of which are a series of small shallow quarries (ST 534 729). The origin and date of the Abbots Leigh group of quarries is not known. Some of them may well have begun as early quern quarries but there is a high likelihood that much of this work was carried out for the medieval abbots of St Augustine's, Bristol, who owned the estate. It would be interesting to know how frequently the conglomerate occurs in ecclesiastical and secular medieval stone buildings in and around Bristol. As yet the writer has done no documentary work on these quarries and there is scope here for future research.

Below the linear feature in outcrop no 8 (at ST 537 732) one piece of worked stone was found which might have been a fragment of the rim of a rotary quern roughout, but this was very uncertain. This was the only possible roughout found on any of the outcrops examined; but as pointed out above due to the technique of manufacture the absence of such evidence need not necessarily imply that querns were not produced at any of the exposures examined.

Towards the end of the survey it was realised that the various outcrops of conglomerate had a slightly variable lithology, which might, with a proper sampling programme of querns and rock specimens, narrow down the origin of the querns considerably. Indeed such work may in future yield considerable detailed information about marketing if several sources of this conglomerate can be isolated.

CONCLUSION

This preliminary survey of the outcrop of two types of rocks known to have been the source for Roman and earlier quernstones has demonstrated that they have been extensively quarried in the past, but it has not proven possible to date this activity by fieldwork alone. Some quarries in the Long Ashton and Ashton Court area may well be Roman or earlier, the dating of the other quarries is uncertain.

Querns are a relatively neglected field; the latest British publication of a comprehensive quern typology was published by Cecil Curwen in 1937 and 1941, and this pioneer work urgently needs updating. Apart from early work on the Mayen Lava querns imported from the Rhineland, little petrological work took place until recently. It was Crawford (1953; 98 - 106) who first suggested that petrological work and location of quern quarries was a fruitful 'new field of research ..... waiting to be explored'. Progress has been inexplicably slow in the thirty years since that note, due one suspects more to a lack of interest rather than a lack of technology for such research. It is fortunate that one of the few petrological studies of querns from a whole area to have taken place is a recent survey of querns from Avon by Caroline Ingle (1982 and 1984). This survey of seventy stones showed that the majority of these querns were of Old Red Sandstone, Portishead beds Sandstone and conglomerate, and Brandon Hill grit quartzite. While some of these stones may have been quarried in the Mendips, most of these querns probably came from quarries on the Failand ridge or in the Portishead - Clevedon areas. It is too early to draw any detailed conclusions about the nature of the quern production industry and the pattern and mode of trade of these items, but one day this may be possible, and undoubtedly the conclusions reached as the result of further work will be of great interest and importance.

ACKNOWLEDGEMENTS

I would like to thank Mr Branfoot for his work on the querns for Marshfield which led to this survey and K Blockley for allowing me to quote the Marshfield querns here and for other help. I would like to thank all the Landowners who gave me permission to examine land not transversed by footpaths. I would also like to thank D J Pollard and V Russett and the staff of Bristol City Museum for help with various aspects of the evidence. All errors and conclusions are the responsibility of the writer.

NOTES

1 (ST 799761). Excavations directed by K & M Blockley, sponsored by Avon County Council, financed by Manpower Services Commission.

2 Pecked with a point rather than battered with a maul. No stone mauls were noted on any quarry site. Probably metal picks and wedges would be the main tools used to prise blocks out (using the natural joints in the rock - which shows no bedding). The querns could be dressed by a robust well-steeled pick with a pointed blade, the other end finished as a hammer.

3 A number of erratic boulders of the conglomerate were also noted along the south side of the Failand ridge. It is unlikely that all have been transported by the hand of man, and some were probably left during the erosion of this anticline, resting on the later rocks around the core of the fold. These erratics are not considered to have been a source of stone for quern manufacture on an industrial scale.

4 There is a superb dated and inscribed mid eighteenth century boundary stone to mark the margin of 'Hathways' at *c.* 52117207 to the west of the footpath.

5 Fieldworkers are warned that this feature is dangerous as it is heavily overgrown. The writer learnt of this quarry by falling into it (face down into a bed of nettles and brambles and pulling a shoulder muscle)! This injury and a later incident involving an aggressive bull near Lower Failand added a bit more interest to a summer evening's fieldwork!

BIBLIOGRAPHY

Blockley K (forthcoming *Excavations at Marshfield, Avon, 1982*

Branigan K (1977) *Gatcombe the excavation and study of a Romano-British villa estate 1967-76* Brit Archaeol Rept No 44. Oxford

Crawford O G S (1953) *Archaeology in the field,* London

Curwen E C (1932) 'Querns' *Antiquity XI,* 133-51

Curwen E C (1941) 'More about Querns' *Antiquity XV* 15-32

Ingle C J (1982) *A petrological study of some quernstones from the Bristol Region*, dissertation Dept of Classics & Archaeol, Bristol Univ.

Ingle C J (1984) A Petrological study of some quernstones from the Bristol Region, *BAA,* 3

Phillips C W (1933) 'Fieldwork' *Proc Univ Bristol Spelaeol. Soc* 5, 139-50

ROMANO-BRITISH SITES IN THE CITY OF BRISTOL - A REVIEW & GAZETTEER

J. R. Russell & R. G. J. Williams

This survey of Romano-British evidence in Bristol is divided into two parts: the first part is a brief review of that evidence, the second is a gazetteer listing all known sites with their main references.

INTRODUCTION

The early historians of Bristol had little doubt that their native city, like its lesser neighbours Bath and Gloucester, had its origins in a major Roman town. William Barrett and Samuel Seyer, writing in 1789 and 1821 respectively, devoted many pages of tedious argument to proving the existence of this settlement, which they called *Caer Brito,* while as late as 1881 J F Nicholls, in his *Bristol Past and Present,* published plans (at different scales!!) comparing the topography of 'Ancient Bristol' and 'Ancient Rome' (Nicholls & Taylor 1881, 23). By the end of the 19th century this era of antiquarian speculation had passed, and a new breed of amateur archaeologists, led by the redoubtable J E Pritchard, were active in the city. Pritchard and his colleagues, who were mostly members of the Clifton Antiquarian Club, displayed a remarkably progressive approach in their recording of antiquities threatened by destruction, their most notable achievement in the Roman field being the salvage excavation of the Brislington villa (gazetteer B2) in 1899.

Pritchard's careful observation of sites in central Bristol helped to prove that Bristol as a town dated back only to the late Saxon period. The recognition of this fact, while long overdue, may have had the unfortunate effect of lessening interest in the Roman period among local archaeologists and historians. While the fieldwork of G C Boon and others in the 1940's, supplemented by more recent excavations by Bristol City Museum and Bristol University, has highlighted the existence of substantial Roman settlements at Sea Mills and around Kings Weston, it is still all too often assumed that the remaining 120 square kilometres covered by modern Bristol were virtually uninhabited during the Roman period. It is hoped that the present article, which attempts to list all known or alleged finds of Roman material within the existing city boundaries, will help to dispel this illusion, and will encourage fieldworkers in all parts of the city to keep a closer watch for Roman remains when examining building sites and other new developments. While it is thought that no major discoveries have been omitted, it is probable that some minor finds of coins or pottery may have been overlooked. The authors would be interested to hear of such items for inclusion in a future supplement.

SEA MILLS

The recent history of the Roman settlement at Sea Mills *(Abone)* is a depressing one. Large portions of the site have been either destroyed or permanently obscured by a dock (1712), a railway (1863) and an arterial road (1923) while since the 1920's most of the intervening areas have been covered by housing, generally without prior archaeological investigation. The various small-scale explorations of the site carried out in the first half of this century were mostly characterised either by haste or incompetence (although the valiant attempts at salvage by the young G C Boon in the mid 1940's (A1h) deserve an honourable mention) and it was not until 1965 that the first adequate rescue excavation (A1k) was carried out by Bristol City Museum. The last major opportunity to unravel the history of this important site will come when the prefabricated estate centred on Hadrian Close is eventually redeveloped; little less than total excavation of this crucial area will suffice.

The development of *Abone,* insofar as it can be deduced from the available evidence, is briefly outlined in section A of the gazetteer. It should be noted that the early military occupation is so far represented almost entirely by artefacts, and that we have few real clues as to its nature, its extent or the date of its termination. The evidence for the later civil settlement is more substantial, but leaves many questions unanswered. While the siting of *Abone* must have been determined by strategic rather than commercial considerations, it is clear that the town was subsequently well placed to develop as a port, and more particularly as a ferry terminal for South Wales. Provisions and reinforcements for the Welsh garrisons would have regularly passed through the settlement, as would lead from the Mendips and freestone from the quarries of Box and Dundry. In addition the town would have provided a distribution point for the surplus agricultural produce of the lower Avon valley, a function which would have become more important with the development of a 'villa economy' in the area during the late 3rd century.

The excavated remains of *Abone* seem to confirm that the settlement was a thriving one, densely built up. At the same time, however, there are remarkably few signs of wealth or sophistication. The buildings so far examined are all shops and houses of a very modest character, even in their later stone phases; no hypocausts or bath suites have yet been identified, while mosaics are represented only by a few scattered tesserae. The defences of the town, if there were any, have yet to be located, and also its main cemeteries; the expected site of the latter, on the ridge to the south of the settlement, produced only scattered burials in 1972 (C13-15). The relationship of the town to the main roads linking it with Bath and Gloucester (G1, G2) has yet to be established. It should be noted that the routes of these roads, as outlined in section G of the gazetteer, are still largely conjectural, being based for the most part on the alignments of modern roads and field-boundaries rather than on physical evidence, which, with the exception of the fine stretch of 'agger' on Durdham Down (G1), remains elusive.

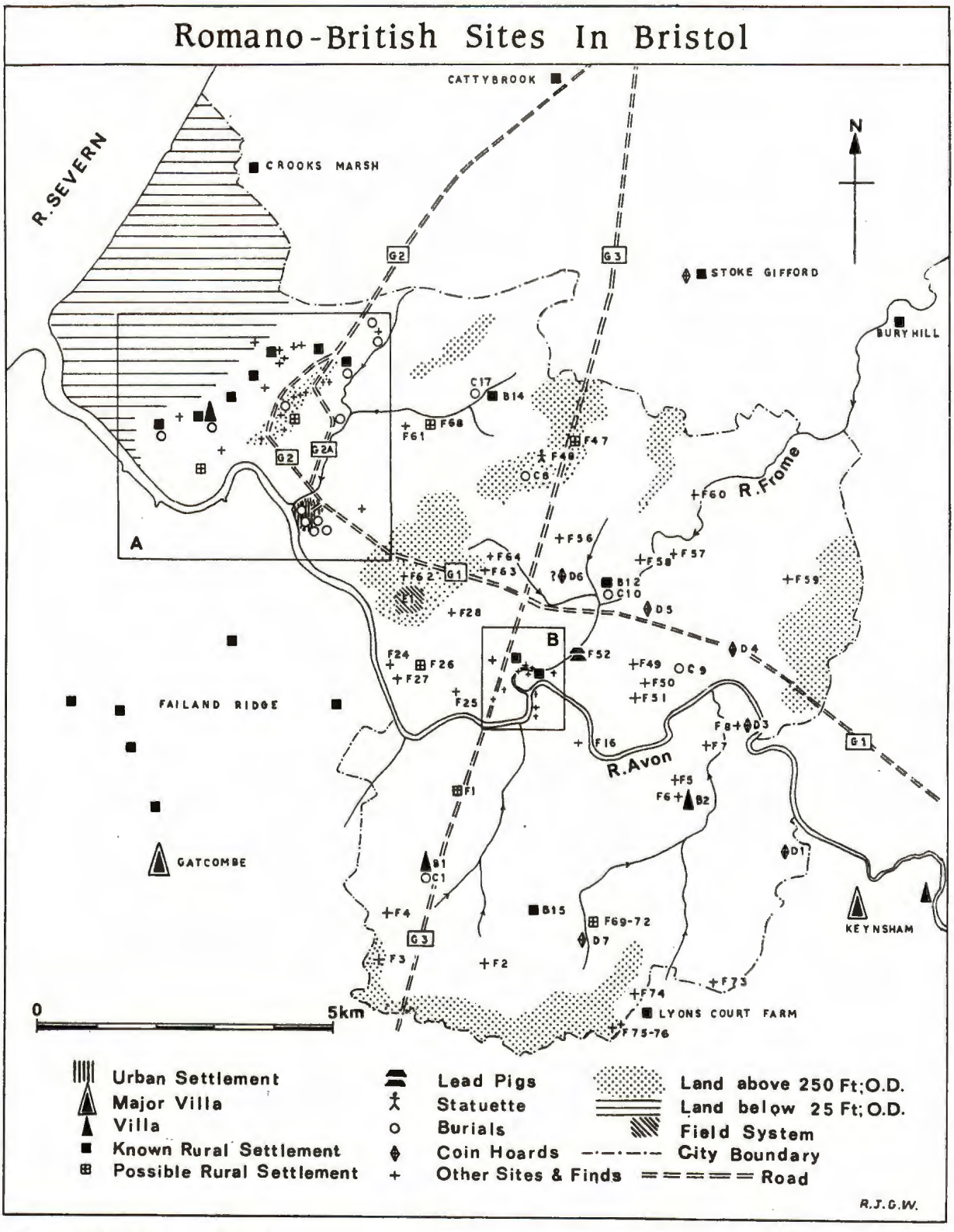

Fig 1 Romano-British sites in Bristol

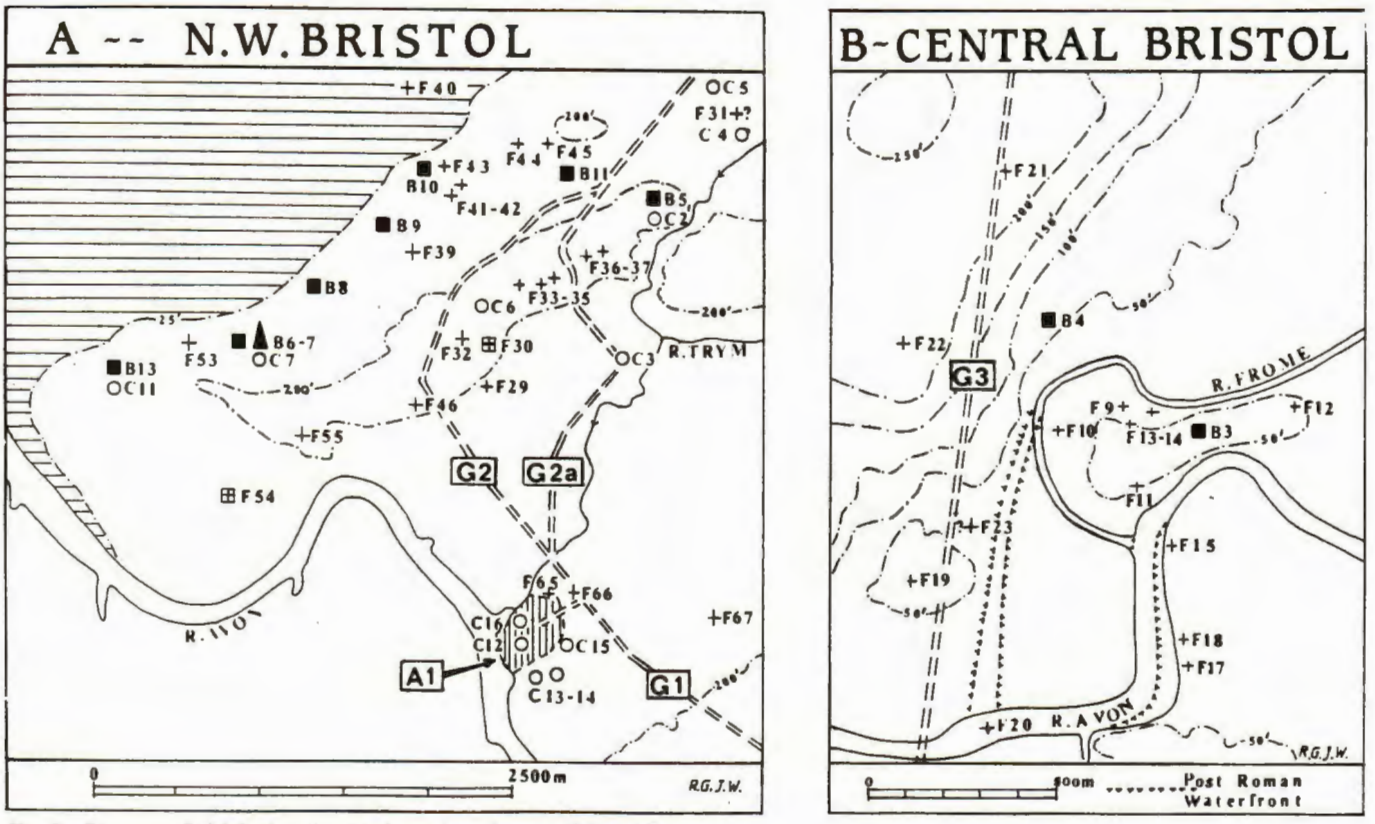

Fig 2 Romano-British sites in north-west and central Bristol

RURAL SETTLEMENT

The existing evidence for Romano-British rural settlement in Bristol is limited in quantity and generally poor in quality, and any balanced account of its development must inevitably make some use of data from sites outside the city boundary. The 15 known settlements listed in section B of the gazetteer are those for which there are reliable records either of structures or of a sufficient range of finds to indicate permanent occupation. Another 7 possible settlements for which the evidence is less conclusive are included in section F. These are at Bedminster (F1), Clifton (F26), Coombe Dingle (F30), Horfield (F47), Shirehampton (F54), Westbury-on-Trym (F68) and Bamfield, Whitchurch (F69-72). Two further possible settlements, at Henbury and St. George, may be inferred from finds of burials (C4-5, C9). Of these 24 known or possible sites, 11 are located on Triassic keuper marl, 5 on Triassic sandstone, 4 on Carboniferous limestone and 4 on Jurassic (lower lias) limestones and clays. As we shall see later, there is a significant concentration of sites in north-west Bristol, between Sea Mills and the alluvial plain bordering the Severn. Elsewhere, there are marked gaps in the settlement pattern, most notably in the Kingswood coalfield to the east of the city, which in Roman times was probably an area of woodland and waste, as it is known to have been during the medieval period. There can be little doubt, however, that further sites remain to be discovered.

At the time of the Roman invasion in AD 43 the celtic inhabitants of the Bristol region were settled partly in open farmsteads and partly in heavily defended hillforts established some centuries before. While it is now thought that many hillforts in Southern England had fallen into disuse by the end of the Iron Age, pottery from excavated examples in the Bristol area, such as Blaise Castle (B5), Bury Hill *(PUBSS* 3, 8-24) and Stokeleigh (*PUBSS* 14, 29-63) suggests unbroken occupation into the conquest period. At Blaise Castle and (less certainly) at Bury Hill there is evidence of reuse, presumably by Roman military units, in the later 1st century AD.

During the first two centuries of the Roman occupation farmsteads in the Bristol area seem generally to have been small and unsophisticated, displaying little advance on those of the Iron Age. In the late 3rd and early 4th centuries, however, there was an upsurge in the construction of fully Romanised farms or villas throughout the region. This spate of villa building has been plausibly associated with the disposal of a large imperial estate to private entrepreneurs, some of whom may have been immigrants from Gaul or Germany. Establishments such as the massive walled compound at Gatcombe (Branigan 1977) or the sumptuous courtyard villa at Keynsham *(Archaeologia* 75, 109-138) can hardly be other than the products of major outside investment. Within Bristol small but well-appointed villas dating from around 270 AD have been excavated at Brislington (B2) and Kings Weston (B7), while a third, on Bedminster Down (B1) is sketchily known from chance finds. Other potential villa sites within the city include Upper Maudlin Street (B4) and Baptist Mills (B12). The

recently discovered site at Filwood Park (B15) provides a good example of a more modest farmstead remodelled and expanded during the 3rd century. The marked concentration of settlements around the Kings Weston villa (B6-11, B13) has frequently been interpreted as a series of tenant farms dependent on the villa and contemporary with it. This is probably an over-simplification, since while the material from these sites is predominantly of 3rd-4th century date, recent excavations at St Bede's School, Lawrence Weston (B10) have produced an occupation sequence starting in the 1st century. Independent evidence for late Roman agricultural expansion in this locality has however been provided by the recent work of Dr R and Mrs A Everton at Crooks Marsh Farm, in the middle of the alluvial Severnside plain some 4km north of Kings Weston (*BARG Rev* 2, 57-8). The location of this site, which has produced traces of extensive 4th century occupation associated with a rectilinear system of drainage ditches, strongly suggests that it formed part of a much larger scheme of late Roman drainage and reclamation extending over considerable portions of the coastal plain and presumably protected from the sea by embankments along the Severn.

The economic data available from Roman rural sites within Bristol is at present exceedingly meagre, and does not permit the type of extended analysis attempted by Branigan, Barker and Webley for the nearby Gatcombe estate (Branigan 1977, 192-211); published faunal evidence, in particular, is negligible. Cereal production on a substantial scale is suggested by the finding of large millstones, upwards of 60cm in diameter and requiring a geared drive, at Sea Mills (A1), Kings Weston (B7), Upper Maudlin Street (B4) and Bamfield, Whitchurch (F71), as well as by the 'corn-driers' or malting-ovens found in the 'Western Building' at Kings Weston (B6) and (less certainly) at Filwood Park (B15). A further indication of the importance of arable farming in the local economy is provided by the system of 'Celtic' fields on Durdham Down (E1); the circumstances in which these fields have survived, on land regarded during the medieval period as suitable only for rough grazing, suggests an intensively cultivated Roman landscape in which every available acre was being exploited. Finally, it should be noted that metal-working seems to have played a significant, if subsidiary, role in the economy of several local settlements, particularly during the 3rd and 4th centuries. Within Bristol the best evidence for this comes from Filwood Park (B15), where it is clear from finds of trial castings in lead that the manufacture of substantial bronze objects, including *paterae,* was being attempted. It is probable, though not certain, that coin-counterfeiting was also being carried out at Filwood Park in the late 3rd century; definite evidence for this practice is provided by the moulds found on a nearby site at Lyons Court Farm (*Arch J* 122, 13-51) as well as by the contents of the adjacent Bamfield hoard (D7).

RELIGION AND BURIALS

Most Roman temples in the Bristol region are situated on isolated hilltops. Within Bristol potential sites of this type can be identified at Blaise Castle (B5) where a rectangular structure now thought to be a temple was partly excavated in 1918 and at Horfield, where a votive figurine of Mercury was found in 1935 (F48). The Horfield Mercury (Fig 3) while as yet an isolated chance find, raises the intriguing possibility of continuity of religious use from Roman times to the present day, since less than 150m from the findspot stands the parish church of Horfield, in an isolated circular churchyard which has been compared with the early Christian graveyards of Devon and Cornwall (Pearce 1982, 131-2). Sea Mills has produced a votive figurine of Jupiter (BRSMG: F4145) and an elaborately decorated altar (A1(k)).

The burials listed in Section C of the gazetteer, which include several undated inhumations (e.g. C4, C8) are nearly all of types found elsewhere in the Romanised South West (cf Leech 1980). Cremations, dating from the 1st and 2nd centuries, are so far known only from Sea Mills (C14). Most of the inhumations seem from their lack of orientation to be 'pagan' in character; distinctively 'pagan' ritual practices include decapitation (C15), the placing of hobnailed boots on or near the feet (C5,11,15,16) and the deposition of iron objects, probably nails, in the mouth (C15). While most of these burials were supine and extended, some were placed face downwards (C5,15,16) or (more unusually) on their sides with the limbs flexed (C5,12,17). Set apart from the other burials are the cemeteries of unaccompanied, extended inhumations with heads to the west found on Kings Weston Hill (C6) and around the 1918 building at Blaise Castle (C2). Burials of this type, which seem to be late or Post-Roman and at least potentially Christian, have now been recorded on several sites around Bristol, including Portishead (Rogers 1979) Stoke Gifford (*BARG Bull* 6, 154-5) and Tytherington (*TBGAS* 34, 66-7). At Balise Castle the relationship between a probable temple and a later 'Christian' cemetery is paralleled locally at Brean Down and Lamyatt Beacon (Leech 1980,

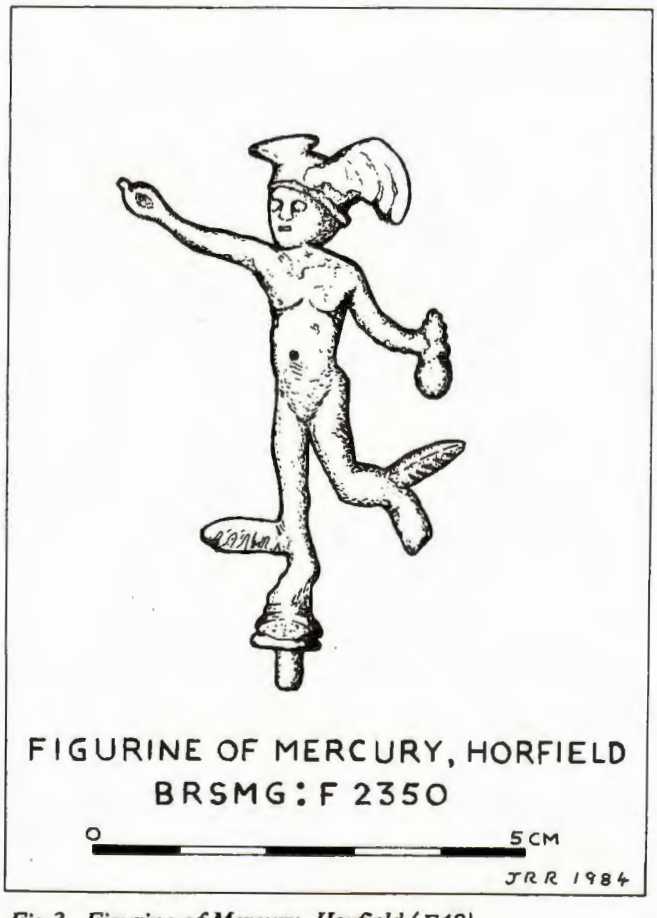

Fig 3 Figurine of Mercury, Horfield (F48)

349-50) and Henley Wood (Branigan 1977, 169). A late Roman date can also be proposed for the crudely executed tombstone from Nazareth House, Sea Mills (C13), although a symbol at the apex of the slab can no longer be regarded as an incomplete Christian 'chi-rho' monogram (Thomas 1981, 127).

THE LATE ROMAN PERIOD AND BEYOND

For much of the 4th century the lower Avon valley, with its numerous newly-constructed villas, seems to have remained relatively secure and prosperous. Around 370 AD, however, the first indications of disruption and decline appear. At Sea Mills the buildings excavated in 1965-66 (A1 (k)) are thought to have fallen into decay at about this time, with burials close to the centre of the occupied area (C12, C16) indicate that the settlement was either shrinking in size or losing any pretensions to urban status. By the early 5th century the growing dislocation of organised commerce and communications is likely to have caused the town's permanent abandonment. In the surrounding countryside the villas at Brislington, Kings Weston, Gatcombe and Keynsham all seem to have been either destroyed or abandoned around 370 AD, probably as a result of localised barbarian raids along the Avon. All four sites were subsequently reoccupied, but on a greatly reduced scale. These and other rural settlements in the area may well have continued in use for a good part of the 5th century, if not beyond it. Eventually, however, economic collapse,coupled with a reduction in population and the danger of further barbarian incursions, must have led to the desertion of many sites, and a return to the relative security of hill-forts such as Cadbury Congresbury (Burrow 1981); the uncertainty of the times is well illustrated by the discovery of a skeleton with head-wounds dumped in a ruined hypocaust of the Kings Weston villa (C7).

There can nevertheless be little doubt that when Saxon settlers finally moved into the area in the years following the battle of Dyrham in 577 AD they found not only surviving settlements but recognisable land-units. The best evidence for this comes from a Mercian charter of 691 AD in which an estate at Henbury, probably covering much of the later parish of that name, was granted to the Bishopric of Worcester 'with its ancient boundaries'. While these boundaries, which are not described, may have been established by the Saxons during the previous century, they are more likely to be those of a preceding late Roman estate (Finberg 1957, 4). Another possible instance of a Roman estate surviving intact into the Saxon period is provided by the parish of Clifton, a compact, roughly rectangular block of land defined on the west and south by the Avon and on the north and east by the tithing of Stoke Bishop, the boundaries of which seem to have been established prior to 883 AD (*BARG Bull*, 6, 138-143). The main Roman finds from the parish, which include a probable building (F24, F26-27), are unfortunately known only from a not wholly reliable 18th century source. Clifton does however also contain the 'Celtic' field-system already discussed (E1), the layout of which appears to be related both to the boundaries and road-system of the later parish, and an Iron Age hill-fort, Clifton Camp, which has allegedly produced finds of Roman coins (F24) and which also contains secondary earthworks of uncertain date and purpose (Burrow 1981, 76). The camp, in a commanding position overlooking the Avon Gorge, would have provided an obvious focus for settlement in the troubled post-Roman centuries, especially since the other major hill-fort in the area, Blaise Castle, was apparently in use as a cemetery during this period.

Clifton and Henbury are not the only potential examples of Roman-Saxon continuity in Bristol. The possibility of religious continuity at Horfield has already been discussed, while other medieval village centres within the city, such as Bedminster (B1, F1), Brislington (B2) and Westbury-on-Trym (F68) are situated close to known Roman settlements or findspots. Carefully controlled and properly funded excavation of selected sites, such as Blaise Castle or Clifton Camp, will however be required before we can attempt to 'speak from fact, not theory' regarding the development of the Bristol region during this enigmatic transitional era.

GAZETTEER

INTRODUCTION

In sections A to F of the gazetteer sites are listed alphabetically under the 'parishes' adopted for BAARG parish survey work within the City of Bristol. Diagrams showing the boundaries of these parishes, which approximate to those in existence in the mid 19th century, are included in D P Dawson's Survey of Bristol Churches (*BARG Rev* 2, 9-24; *BAA* 1, 28-44). Only selected references are given; in particular, references to the County of Avon Sites and Monuments Record (ASMR) and Ordnance Survey Record Cards (OSR) are made only where these form the principal source of information for a site. The present location of finds from a site, where known, is given in separate brackets at the end of the relevant gazetteer entry; in the case of material in Bristol City Museum (BRSMG), register, accession or other reference numbers are quoted where available.

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ABBREVIATIONS

Ant J *Antiquaries Journal*
AR *Archaeological Review* (CBA Groups 12 and 13)
Arch J *Archaeological Journal*
ASMR County of Avon Sites and Monuments Record
BAA *Bristol and Avon Archaeology*
BARG *BARG Bulletin* (Old Series)
BARG Rev *BARG Review*
BEP *Bristol Evening Post*
BRSMG Bristol City Museum and Art Gallery
Inf Information provided by
Num Chron *Numismatic Chronicle*
OSR Ordnance Survey Record Card
PBNS *Proceedings, Bristol Naturalists Society*
PCAC *Proceedings, Clifton Antiquarian Club*
PSA *Proceedings, Society of Antiquaries*
PSANHS *Proceedings, Somerset Archaeological & Natural History History Society*
PUBSS *Proceedings, University of Bristol Spelaeological Society*
TBGAS *Transactions, Bristol and Glos Archaeological Society*
UB *University of Bristol*
VCH Som *Victoria County History, Somerset,* Volume 1, 1906

REFERENCES

Atkyns R 1712 *The Ancient and Present State of Gloucestershire*
Barrett W 1789 *The History and Antiquities of Bristol*
Bennett J (forthcoming) *Excavations of Nazareth House, Sea Mills, 1972*
Bingham F 1900 *Horfield Miscellanea*
Boon G C 1967 *Kings Weston Roman Villa*
Branigan K 1977 *Gatcombe Roman Villa* (British Archaeological Reports 44)
Burrow I 1981 *Hillfort and Hill-top Settlement in Somerset in the 1st and 8th Centuries AD* (British Arch Reports 91)
Dahl L H 1934 *Stapleton Past and Present* (MS , Avon Central Ref Library)
Davies J A 1927 *Early Life in the West*
Finberg HPR 1957 *Gloucestershire Studies*
Green M 1976 *A Corpus of Religious Material from the Civilian Areas of Roman Britain* (British Archaeological Reports 24)
Henbury W I, 1958 *A Guide to Henbury*
Jones FC 1946 *The Glory that was Bristol*
Leech R 1980 Religion and Burials in the South Somerset and North Dorset, in *Temples, Churches and Religion in Roman Britain*, 329-366 edited by W Rodwell (British Archaeological Reports 77)
Nicholls JF and Taylor J 1881 *Bristol Past and Present* (Vol. 1)
Pearce SM 1982 Estates and Church Sites in Dorset and Gloucester - the Emergence of a Christian Society, in *The Early Church in Western Britain and Ireland*, 117-135, edited by S M Pearce (British Arch Reports 102)
Ponsford MW 1971 *Bristol Castle; a Short Summary of the Recent Excavations*
Ponsford MW 1974 *Excavations at Greyfriars, Bristol*
Rivet ALF and Smith C 1979 *The Placenames of Roman Britain*
Rogers J 1979 Human remains from a sub-Roman cemetery at Station Road, Portishead in *Rescue Archaeology in the Bristol Area: 1* 7-14,edited by N Thomas
Rudder S 1779 *A New History of Gloucestershire*
Sanigar WT 1931 *St Georges in the East*
Seyer S 1821 *Memoirs Historical and Topographical of Bristol and its Neighbourhood* (Vol 1)
Thomas C 1981 *Christianity in Roman Britain to AD 500*

A – URBAN SETTLEMENT

A1 WESTBURY ON TRYM Sea Mills (ST5575)
Settlement mentioned in the Antonine Itinerary as *Abone* (Rivet & Smith 1979, 240) situated at the confluence of the rivers Trym and Avon. Finds of coins, Samian ware, military equipment and stamped tiles indicate that a military installation, probably a supply base, was established on the site soon after the Claudian invasion and continued in use into the early 2nd century, when it was superseded by a civil settlement covering some 10 hectares. All the buildings so far examined seem to be workshops or small houses; earlier structures are entirely of timber, stone footings only becoming common in the 3rd century. The town, which was apparently undefended, seems to have fallen into decline by the late 4th century, with scattered burials occuring within the occupied area. The principal discoveries made at Sea Mills are listed below in chronological order; burials are dealt with in more detail in Section C.

(a) 1712: Sea Mills Dock (ST550759) 'Arched gateway' and other foundations observed during construction work by J Padmore (Barrett 1789, 12).

(b) 1893: Sea Mills Station (ST54997580) Occupation layer on east side of railway cutting south of station examined by F Ellis (*PCAC* 3, 16-19).

(c) 1899: Sea Mills Lane (ST55047591) Rubbish pits exposed in sewer trench examined by J E Pritchard (*PCAC* 4, 261-2).

(d) 1911-13: Hadrian Close (ST55057580) Foundations south-east of Sea Mills Station excavated by BGAS and CAC (*TBGAS* 35, 160-1; 36,3) (BRSMG: G16-G63 given by P Napier Miles).

(e) 1923: Portway (ST55117577) Parts of four buildings examined during construction work by E K Tratman (*TBGAS* 45, 192-201).

(f) 1934: Portway/Roman Way (ST55137577) Courtyard house excavated for BRSMG by A Selley; foundations preserved and visible from the road (*TBGAS* 59,330) (BRSMG).

(g) 1937-38: 32, Hadrian Close (ST55087580) Wall and drains excavated by D P Dobson (*TBGAS* 59,330-2: 61, 202-23). Finds included a 'Germanic' buckle plate (*Ant J* 41, 87-9)(BRSMG: F3916).

(h) 1945-46: Hadrian Close (ST55047580) Walls, drains, stone floors, gravel spreads, rubbish pits and burials (C12) examined by G C Boon (*TBGAS* 66, 258-95) (BRSMG).

(i) 1954: 31, Hadrian Close (ST55087577) Stone floor sealing 1st century occupation layer excavated by K R Nightingale (*TBGAS* 73, 70-2) (BRSMG).

(j) 1965: 5, Hadrian Close (ST55077572) 1st century timber structure excavated by R Mines and E Davies.

(k) 1965-66: Sea Mills Lane (ST55137588) Shops and houses facing onto east-west street excavated by BRSMG (*BARG Bull* 2, 64-66)(BRSMG: 274/1965) Finds included a decorated freestone altar (BRSMG: F4181).

(l) 1967: 87, Sea Mills Lane (ST55037589) Stone and timber buildings and burials (C16) excavated by BRSMG(*AR* 2,14) (BRSMG).

(m) 1972: Nazareth House (ST553757 area) 1st century ditch, 2nd century quarry-pits and burials (C14-15) excavated by BRSMG (*AR* 7, 29; Bennett forthcoming) (BRSMG: 66/1972).

In addition to the above, numerous chance finds have been made Sea Mills, many of which are now housed in BRSMG. For a summary of the numismatic evidence to 1965, see *TBGAS* 85, 218-20. For a general plan of the site, see *AR* 7, 28.

B – VILLAS AND OTHER RURAL SETTLEMENTS

B1 BEDMINSTER Bedminster Down (ST572699 area)
Pottery and remains of substantial building(s) with wall plaster and tesserae found 1904 and 1926 (*PUBSS* 2, 89; 3, 298; 9, 163) (some material in UBSS museum) See also C1.

B2 BRISLINGTON Winchester Road(ST61647097)
Villa excavated by BRSMG 1899. Of winged corridor type, facing south, with 10+ rooms and small bath suite in north-west corner. The building appears to have been constructed in late 3rd century and destroyed circa 370 AD; limited squatter occupation followed. A well to the north contained human remains and building debris associated with the destruction phase (*TBGAS* 23, 298-308; 24, 283-90. *PSAHNS* 116, 78-85) (Finds and mosaic from Room 2 in BRSMG; mosaic from Room 1 relaid in 'Eastern Building', Kings Weston (B7))See also F6.

B3 CITY (INNER) Peter Street (ST59127313)
Bow brooch, flue tile fragment, coin of Constantius II and 1st-4th century pottery found in BRSMG excavations 1975-76 (*BAA* 1, 8) (BRSMG: 57/1975).

B4 CITY (ST. JAMES WITHIN) Upper Maudlin Street (ST58707343)
2nd-4th century settlement excavated by BRSMG and UB 1973-76. Fenced yard and stone-based (?) barn overlying a burnt area and field boundary. Finds included part of a large millstone. (Ponsford 1974, 8; *BARG Bull* 4, 219; 6, 6) (BRSMG: 242/1973).

B5 HENBURY Blaise Castle Hill (ST55887838)
Extensive 1st-4th century occupation within Iron Age hillfort. Numerous coins were found in 1707, 1766-68 and 1819 (Atkyns 1712, 474; Rudder 1779, 491; Barrett 1789, 14-15; Seyer 1821, 157-58; *PUBSS* 10, 7-8) A rectangular structure variously interpreted as a late Roman temple or a Medieval chapel was excavated by J A Bartlett 1918 (*TBGAS* 41, 163-9). Further finds of pottery, coins and other material were made in trial excavations by P A Rahtz 1957 (*PUBSS* 8, 147-171) (BRSMG) and in BRSMG excavation below south-east turret of Blaise Castle 1982 (BRSMG: 41/1982) For cemetery see C2; see also F31.

B6 HENBURY Kings Weston, Long Cross (ST53377755)
'Western Building', predating late 3rd century 'Eastern Building' (B7) partially examined by G C Boon and J S C Brown 1948-1950. A T-shaped 'corn-drier' was inserted in the structure in the 4th century (Boon 1967, 7, 21).

B7 HENBURY Kings Weston, Long Cross (ST53397755)
Villa ('Eastern Building') excavated by G C Boon and J S C Brown 1947-49. The building consisted of 9+ rooms grouped around a hall or courtyard closed on the south by an inward facing corridor; a bath suite adjoined the west wing. It was constructed in the late 3rd century and largely destroyed *circa* 370 AD; limited squatter occupation followed. Traces of further buildings were noted to the west (B6) and to the north of Long Cross. The site is preserved and can be visited on application to Blaise Castle House Museum (*TBGAS* 69, 5-58; 86, 195-6) (BRSMG: 74/1948). See C7

B8 HENBURY Kings Weston, Long Cross (ST538779)
Walls, roof-tiles, possible lime-kiln and 3rd-4th century pottery found by G C Boon *circa* 1948 (ASMR 746).

B9 HENBURY Kings Weston, Long Cross (ST542783)
Rubble and 3rd-4th century pottery found by G C Boon 1948 (ASMR: 764).

B10 HENBURY Lawrence Weston, St Bedes R C School (ST54447860)
1st-4th century settlement excavated by UB 1982. Succession of N.-S. ditches, walls and fences formed W. boundary of occupation area with rough cobbling and 4th century oven or furnace (*BAA* 2, 50) (BRSMG: 32/1982) See also F43.

B11 HENBURY Lawrence Weston, Long Cross (ST553786)
Walls and stone-lined pit containing pottery, including Samian-ware, found by G C Boon *circa* 1948 (ASMR 775).

B12 ST. JAMES WITHOUT Baptist Mills, (?) Stafford Road (ST604747 area) Spread of (?) 3rd-4th century pottery, flue tiles, mortar and bones of ox, sheep and pig found by F Ellis 1889-91 (*PCAC* 2, 160-1) See C10.

B13 SHIREHAMPTON Watling Way (ST52587739)
Walls and pottery found by G C Boon 1948 (OSR ST57 NW9) See C11.

B14 WESTBURY-ON-TRYM Southmead, North end of Henleaze Lake (ST58257788) Iron Age silver coin, spread of pottery including Samian, brooches, buckle and teeth of ox, horse, sheep and pig found by F Ellis and J E Pritchard 1889-91 (*PCAC* 2, 158-9) (Silver coin BRSMG: 026. Samian sherd BRSMG: F1815)

B15 WHITCHURCH Filwood Park (ST59036920)
2nd-4th century settlement examined by R G J Williams and BRSMG 1982. Several rectangular stone-based buildings, cobbled areas and ditches, together with evidence for metal-working. (*BAA* 2, 12-20) (Some material in BRSMG: 49/1982).

C – BURIALS

C1 BEDMINSTER Bedminster Down (ST572699 area)
Lead coffin allegedly found during quarrying *circa* 1870 (*PSAHNS* 72, 91)(Allegedly reburied in Bishopsworth churchyard).

C2 HENBURY Blaise Castle Hill (ST55887838)
Cemetery of extended inhumations in rock-cut graves, mostly aligned east-west with heads to west. Inhumations, 10+, found during excavation of rectangular building (B5) by J A Bartlett 1918 (*TBGAS* 41, 166-168). A further inhumation with 4th century coin below skull found by P A Rahtz 1957 (*PUBSS* 8, 147-171)(BRSMG). Inhumations, 3, found in BRSMG excavation below south east turret of Blaise Castle 1982 (BRSMG: 41/1982).

C3 HENBURY Coombe Dingle, Pitchcombe Gardens (ST55687748)
Stone coffin with rounded ends, containing inhumation accompanied by pottery flagon, found 1972 (BEP 28.7.82) (BRSMG).

C4 HENBURY Henbury Awdelett (Manor House School) (ST564 788).
Undated inhumation found in garden 1898; reburied in Henbury Churchyard next to east boundary wall. Other undated inhumations allegedly found during road widening close to house. (Henbury W I, 1958, 22).

C5 HENBURY Henbury Comprehensive School (ST56227907)
Inhumations, 4+, aligned roughly north-south, excavated by BAARG 1982. Three were contracted while the fourth was extended, face downwards, in wooden coffin with pair of hobnailed boots between knees. (*BAA* 2, 21-24) (BRSMG: 33/1982).

C6 HENBURY Kings Weston Hill (ST54937783)
Inhumations, 10+, excavated by C Godman 1966. All were extended and aligned east-west, with heads to W. (*PUBSS* 13, 41-8)(BRSMG).

C7 HENBURY Kings Weston, Long Cross (ST53397755)
Male inhumation found in Room 11 of 'Eastern Building' (B7) during excavation by G C Boon and J S C Brown 1947-49. Skull bore marks of sword-cuts, and body had been deposited in collapsed hypocaust *circa* 400 AD. A second, fragmentary, inhumation was noted east of building (*TBGAS* 49, 18, 57) (BRSMG: 74/1948).

C8 HORFIELD Kellaway Ave. (ST58857650)
Undated inhumations found 1896 (Bingham 1900, 35).

C9 ST. GEORGE 11-15 Roseberry Road (ST61467325)
Inhumations, 8+, with single sherd of pottery and fragment of lead sheet, found by F Ellis 1894 (*PCAC* 3, 88; *PUBSS* 4, 54; Sanigar 1931, 37-8) (Skulls in Anthropological Museum, UB; other bones reburied in Avonview cemetery).

C10 ST. JAMES WITHOUT Baptist Mills, (?) Stafford Road (ST604747 area) Lead coffin (originally cased in wood) and two stone-lined cists found 1889. Coffin aligned E-W. and contained female inhumation with head to E; coin of Constantine found nearby. (*PCAC* 2, 83-5) (lead coffin BRSMG: E406 (old), given by R N and R H Bryant 1900. Fragment of cloth (?) from coffin BRSMG: file 180). See B12.

C11 SHIREHAMPTON Watling Way (ST52587739)
Stone coffin with half-hexagonal head, aligned north-south, containing inhumation with hobnails, found by G C Boon 1948. (OSR ST57 NW9; BEP 5.3.48) See B13.

C12 WESTBURY-ON-TRYM Sea Mills, Hadrian Close (ST550758)
Inhumations, 3, excavated by G C Boon 1946 within area of Roman town. Two were contracted, aligned northeast/southwest and north/south respectively, while the third was extended in a wooden coffin, aligned east-north-east/south-south-south-west (*TBGAS* 66, 271-77)(BRSMG).

C13 WESTBURY-ON-TRYM Sea Mills, Nazareth House (ST55257558)
Fragment of tombstone with crudely incised inscription SPES C SENTI ... and female portrait bust found with female inhumation and coin of Domitian 1873 (*Arch J* 31, 41-6; *PCAC* 2, 158; Bennett forthcoming) (BRSMG: F2375, given by J Evens 1892).

C14 WESTBURY-ON-TRYM Sea Mills, Nazareth House (ST55227557)
Cremations, 9, excavated by BRSMG 1972. Grave goods including pottery, iron nails and a bronze bracelet (*AR* 7,29; Bennett forthcoming)(BRSMG: 66/1972).

C15 WESTBURY-ON-TRYM Sea Mills, Nazareth House (ST55317576)
Inhumations, 3, aligned north-south, excavated by BRSMG 1972. All extended, two lying in 2nd century quarry pits and the third in a shallow grave. Of the former, one was an adult, face down with an iron object in the mouth, and hobnailed boots; the second was a young girl, with head placed on pelvis. The third was also an adult, face down with an iron object in the mouth (*AR* 7, 29; Bennett forthcoming)(BRSMG: 66/1972).

C16 WESTBURY-ON-TRYM Sea Mills, Sea Mills Lane (ST55037589)
Inhumations, 3, excavated by BRSMG 1967 within area of Roman town. One was male, face downwards; second was female, in a wooden coffin, with hobnailed boots; third was an infant.

Both adult burials were aligned east-west with heads to east (*AR* 2, 14; additional inf Mr J Constant)(BRSMG).

C17 WESTBURY-ON-TRYM Southmead, Bowness Gardens (ST580778 area) contracted inhumation and coins found *circa* 1810 (Seyer 1821, 104).

D – COIN HOARDS

D1 BRISLINGTON Brislington House estate (ST633702)
23+ coins of House of Constantine, fragment of metal vessel and 6 sherds found 1828 (*TBGAS* 23, 290; *VCH Som* 358) (BRSMG: 704/632-61, given by Dr Fox 1829).

D2 (?) BRISLINGTON Bristol-Bath railway line (exact site unknown) 250+ *denarii*, Valens-Magnus Maximus, found during construction of GWR near Bristol 1839 (*Num Chron* 1840, 144; *VCH Som* 350, 358).

D3 BRISLINGTON 24 Rochester Road (ST62627231)
1476 *denarii*, M Antony-Geta, in metal vessel, found 1937 (*Num Chron* 1938, 85-98) (95 coins in British Museum, rest in BRSMG: file 2157M). See F8.

D4 ST. GEORGE (?) Church Road (ST625735 area)
'Urn of coins' found prior to 1789 (Barrett 1789, 10).

D5 ST. GEORGE (?) Roman Road (ST609743 area)
732+ coins, Gallienus-Constantine I, found 1875 (Nicholls & Taylor 1881, 24, *PSA* 8,387) A group of 387 coins formerly in the possession of Sir John Evans (*Num Chron* 1885, 118) and the so-called 'Montpelier Hoard' (D6) may have formed part of this hoard.

D6 ST. JAMES WITHOUT (?) Montpelier (ST594744 area)
60+ coins, Probus-Constantine II, allegedly found in pot at Montpelier prior to 1894. Perhaps part of D5(*PCAC* 3, 122; *TBGAS* 60, 194-197) (BRSMG: G1237).

D7 WHITCHURCH Bamfield, Maesknoll Old Peoples Home (ST60066878) 2000+ 3rd century radiate minims and 200+ worn *sestertii*, Claudius-Maximianus, found 1869 (*Arch J* 27, 67-70; 122, 15-17; Nicholls and Taylor 1881, 25; *VCH Som* 368-9)(328 minims in Ashmolean Museum; 4 in Roman Baths Museum, Bath; 2 in BRSMG).

E – FIELD SYSTEMS

E1 CLIFTON Durdham Down((ST569746 area)
Group of roughly rectangular fields covering approx. 10 hectares, divided by low banks of limestone rubble and laid out on a consistent north-north-west/south-south-east alignment. At ST56837463 the system is intersected by a contemporary trackway running north-south (*BARG Bull* 6, 139-140; *PBNS* 7, 93-104).

F – OTHER SITES AND FINDS

F1 BEDMINSTER Chessel Street (ST578712 area)
Field name 'Le Chasele' (*circa* 1350) suggests possible settlement; no known finds (ASMR 903; Inf Mrs F Neale).

F2 BISHOPSWORTH 92 Coleshill Drive (ST58116831)
Enamelled bow brooch found *circa* 1971 (*AR* 6, 26)

F3 BISHOPSWORTH Highridge Common (ST56486834) *Denarius* of Vespasian found by Mr Batten *circa* 1953 (ASMR 646)

F4 BISHOPSWORTH Westward Road (ST565691 area)
Denarius of Julius Caesar found by R Binns 1979 (*Malago Soc. Magazine*, 11, 11).

F5 BRISLINGTON Arnos Vale (ST614714 area)
Mortarium found during construction of N Somerset Railway *circa* 1872 (*PCAC* 2, 162; *TBGAS* 23, 290-1) (BRSMG: F806).

F6 BRISLINGTON 'Lynwood', Bath Road (ST61557098)
Pottery found prior to 1899 (*TBGAS* 23, 291) Adjacent to B2.

F7 BRISLINGTON St. Annes Wood (ST620720 area)
Oval intaglio found *circa* 1910 (*TBGAS* 34, 68).

F8 BRISLINGTON 15 Rochester Road (ST62537234)
Enamelled circular brooch found 1934 (BRSMG: F3588, given by Mr E Crompton 1934) See D3.

F9 CITY (INNER) All Saints Street (ST58907319)
Coin of Maximianus found 1900 (*TBGAS* 23, 265-6).

F10 CITY (INNER) Bell Lane (ST58737313)
Two coins of Maxentius found 1808 (Seyer 1821, 208).

F11 CITY (INNER) Bridge Street (ST590730 area)
Unspecified coins found prior to 1891 (*PCAC* 2, 163).

F12 CITY (INNER) Bristol Castle (ST59367323)
A few sherds of pottery found in BRSMG excavation 1969 (Ponsford 1971, 6)(BRSMG).

F13 CITY (INNER) Pithay (ST58987315)
Coin of Gallienus found 1907 (*TBGAS* 30, 228).

F14 CITY (INNER) Tower Lane (ST58937313)
Coin of Julia Maesa found 1900 (*TBGAS* 23, 265-6).

F15 CITY (REDCLIFFE-TEMPLE) Bristol Bridge (ST59017285)
Small quantity of pottery, including Samian, found in BRSMG excavation 1981 (BRSMG: 48/1981).

F16 CITY (REDCLIFFE-TEMPLE) Pylle Hill (ST598720 area)
Unspecified coins found prior to 1891 (*PCAC* 2, 163).

F17 CITY (REDCLIFFE-TEMPLE) Redcliff Street (ST59107248)
A few sherds of pottery found in BRSMG excavation 1980 (BRSMG: 107/1980).

F18 CITY (REDCLIFFE-TEMPLE) Redcliff Street, Canynges House (ST59087252) Coin of Probus found in BRSMG excavation 1984 (BRSMG: 21/1983).

F19 CITY (WESTERN SUBURBS) College Green (ST584727 area)
Unspecified coins found north of Cathedral 1865 (Nicholls & Taylor 1881, 24).

F20 CITY (WESTERN SUBURBS) Floating Harbour (ST5872 area)
Coins of Julia Maesa and Constantine II found *circa* 1890 (*PCAC* 3, 125). Coloured glass bead found by A Selley (*PUBSS* 5, 179) (BRSMG: F940).

F21 CITY (WESTERN SUBURBS) Montague Place (ST585737)
Coin of Constantine found 1780 (Barrett 1789, 29).

F22 CITY (WESTERN SUBURBS) Royal Fort (ST583784)
Coins of Tetricus, Constantine and Constantius found by T Tyndale *circa* 1760 (Barrett 1789, 29).

F23 CITY (WESTERN SUBURBS) St. Augustines Parade (ST58487280)
Cobbled track or causeway, pottery, brooch and coins allegedly found by A Selley during construction of the Hippodrome, 1912 (Davies 1927, 42; Jones 1946, 12; *PUBSS* 9, 164)

F24 CLIFTON Clifton Camp (ST56657330)
Coins of Nero, Domitian, Trajan, etc. found within Iron Age hill-fort prior to 1789 (Barrett 1789, 10). Coins of Constantine, Crispus and Constantine II allegedly found prior to 1894 (*PCAC* 3, 146, 244).

F25 CLIFTON Junction of Constitution Hill and Jacobs Wells Rd (ST57707285), Two Constantinian coins found by Mr Beavan 1965 (BRSMG: 02017-02018, bequeathed by the finder).

F26 CLIFTON (?) Manilla Road (ST57057330)
Pottery, tiles and bricks found by Sir W Draper, probably during construction of Manilla Hall (since demolished) *circa* 1760 (Barrett 1789, 10).

F27 CLIFTON (?) Sion Row (ST567731 area)
Coins of Constantine, Constantius and Valentinian found 1783-84 (Barrett 1789, 10, 15).

F28 CLIFTON Whatley Road (ST576742)
Coin of Probus found 1885 (*PCAC* 2, 92).

F29 HENBURY Coombe Dingle, Haig Close (ST54857735)
Sherds of cooking pot found by R Hughes 1929 (BRSMG: given by finder).

F30 HENBURY Coombe Dingle, Southwood Drive (ST54887754)
Group of 2nd century pottery found by D W Corp 1954 (*TBGAS* 80, 169-72) (BRSMG: 67/1959, given by finder).

F31 HENBURY (?) Site of Henbury 'Great House' (ST56327894)
Coins, Caligula-Julian, found with a gold *stater* of Cunobelinus 'at Henbury' by Sir S Harcourt, 1708 (Barrett 1789, 13). Seyer's association of this find with the now-demolished 'manor house' or 'Great House' (Seyer 1821, 157) appears to be unwarranted; Blaise Castle Hill (B5) seems a more probable location for the discovery.

F32 HENBURY Kings Weston Hill (ST548775 area)
Trumpet brooch found by R Strange *circa* 1978 (ASMR 2568) (BRSMG: 84/1980).

F33 HENBURY Kings Weston Hill (ST55057793)
Sherds of Samian found during excavation of Barrow T2 by E K Tratman *circa* 1924 (*TBGAS* 79(1), 99).

F34 HENBURY Kings Weston Hill (ST55147793)
Blue glass bead found during excavation of Barrow T1 by E K Tratman *circa* 1924 (*TBGAS* 79 (1), 99).

F35 HENBURY Kings Weston Hill (ST55227796)
Mortarium sherd found during excavation of Barrow T4 by E K Tratman *circa* 1924 (*TBGAS* 79(1), 99).

F36 HENBURY Kings Weston Hill (ST55427808)
Small quantity of 2nd century pottery found during excavation of circular Iron Age enclosure by P A Rahtz 1956 (*PUBSS* 8, 30-6)(BRSMG).

F37 HENBURY Kings Weston Hill (ST55557811)
Small quantity of 2nd century pottery found during excavation of Iron Age hill-fort by P A Rahtz 1956 (*PUBSS* 8, 30-6) (BRSMG).

F38 HENBURY Kings Weston Hill (ST555780 area)
Sherds of hard grey pottery found in field near Kings Weston Camp by F Ellis, 1894 (*PCAC* 3, 175).

F39 HENBURY Kings Weston, Brookthorpe Avenue (ST54487808)
Small quantity of pottery found by G C Boon 1948 (ASMR 765)

F40 HENBURY Lawrence Weston (ST544789 area)
Sherds of grey and black-burnished pottery found in draining a field below village, 1889 (BRSMG: F804, F805, given by S G Perceval).

F41 HENBURY Lawrence Weston, Broadlands Drive (ST54617843)
Large quantity of pottery found by G C Boon 1948 (ASMR 766).

F42 HENBURY Lawrence Weston, Knovill Close (ST54687850)
Samian base and coin of Claudius II found near Aust Farmhouse by N Greenberry *circa* 1976 (BRSMG enquiry).

F43 HENBURY Lawrence Weston , Long Cross (ST54607865)
Large quantities of 4th century grey wares, including wasters, found by G C Boon 1947-49 (ASMR 769) Probably associated with B10.

F44 HENBURY Lawrence Weston, Long Cross (ST55027875)
Pottery found by R and A Everton 1982 (Inf Mrs A. Everton).

F45 HENBURY Lawrence Weston, Long Cross (ST55207877)
Pottery found by G C Boon *circa* 1950 (ASMR 775).

F46 HENBURY Shirehampton Road (ST54487719)
Pottery found by G C Boon 1949 (ASMR 754).

F47 HORFIELD Allotments between Highbury Road and Wessex Avenue (ST59707703) Spread of 2nd-4th century pottery and group of 8 coins, Antoninus Pius-Valens, excavated by BAARG 1982-83.

F48 HORFIELD 'Elmdene', Kellaway Avenue (ST59187687)
Bronze votive figurine of Mercury found by H G Bryant 1935 (Fig. 3). Similar figures are known from Hooe (Devon) and Flempton (Suffolk) (Green 1976, 184, 268) (BRSMG: F2350, given by Mrs Bryant, 1935).

F49 ST. GEORGE Lawrence Hill (ST609734 area)
Unspecified coins found prior to 1891 (*PCAC* 2, 163).

F50 SS PHILIP & JACOB WITHOUT Barton Hill (ST608730 area)
Coin of Domitian found prior to 1894 (*PCAC* 3, 123).

F51 SS PHILIP & JACOB WITHOUT Queen Anne Road (ST60777278)
Coin of Constantine found during demolition of Tilly's Court House 1894 (*PCAC* 3, 77)

F52 SS PHILIP & JACOB WITHOUT Wade Street (ST59747357)
Two lead pigs of Antoninus Pius found on former bank of River Frome 1865 (*VCH Som* 342) (One pig in British Museum, the other in BRSMG: F4316, given by Lady Weston 1895).

F53 SHIREHAMPTON Kings Weston Avenue (ST53107756)
Pottery and coin of Constantine found by G C Boon 1947-49 (ASMR 745).

F54 SHIREHAMPTON St. Bernards Road (ST53297662)
Pottery,including sherd of 2nd century Samian, and pennant sandstone disc found by T R Fry, R Hughes and F Wheeler 1928 (BRSMG: given by finders).

F55 SHIREHAMPTON Shirehampton Road (ST538770)
Unspecified coins found *circa* 1760 (Barrett 1789, 10).

F56 STAPLETON Ashley Down (ST5975 area)
Coin of Constans found in field near Kennington Avenue by R. Chapman, *circa* 1971 (BRSMG enquiry, 10.7.71).

F57 STAPLETON Eastville Park (ST613752 area)
Unspecified coin found by Mr G Williams, 1932 (Dahl 1934, 12).

F58 STAPLETON Eastville Stadium (ST609750 area)
Unspecified coin found prior to 1934 (Dahl 1934, 12).

F59 STAPLETON Fishponds, Mayfield Park South (ST63307475)
Coin of Vespasian found by Mr G Lovell 1934 (Dahl 1934, 14).

F60 STAPLETON 86, Park Road (ST61777625)
Coin of Constantius II found by Mr Dickens 1928 (Dahl 1934, 11).

F61 WESTBURY-ON-TRYM Canford Park (ST56887731)
Sherd of 2nd-3rd century mug found by J R Russell 1969.

F62 WESTBURY-ON-TRYM Durdham Down (ST570750 area)
Coin of Constantine found prior to 1789 (Barrett 1789, 10).

F63 WESTBURY-ON-TRYM Redland Court (ST584789 area)
Pottery scatter noted by F Ellis *circa* 1890 (*PCAC* 2, 162).

F64 WESTBURY-ON-TRYM Redland, Colston Girls School playing field (ST582752) Dark grey sherd and lead disc found 1952 (BRSMG: F2514, given by Mrs De Vote).

F65 WESTBURY-ON-TRYM Sea Mills, 7, Abbeywood Drive (ST552760) Imitation *as* of Claudius found by Mrs S. Cashman 1978 (ASMR 2569).

F66 WESTBURY ON TRYM Sea Mills, 39, Avon Way (ST55407607)
Coin of Antoninus Pius found by Mrs P W Coombs (*BARG Bull* 3, 64).

F67 WESTBURY-ON-TRYM Stoke Bishop (ST560760 area)
Small quantity of pottery found (?) near foot of Stoke Hill by Mr Wheeler, 1929 (ASMR 814).

F68 WESTBURY-ON-TRYM Westbury College (ST57267748)
Pottery and coins found in BRSMG excavations 1968-70 (*BARG Rev* 2, 25) (BRSMG).

F69 WHITCHURCH Bamfield (ST600690 area)
Barbarous radiate and coin of Constantine found by Mr Bradshaw *circa* 1979 (BRSMG enquiry).

F70 WHITCHURCH Bamfield, Clydesdale Close (ST600688)
Pottery found by a Barker *circa* 1973 (BRSMG: Roman Box 15).

F71 WHITCHURCH Bamfield, E. bank of stream (ST601689)
Pair of matching mill-stones found by Mr Harper 1974 (ASMR 2597) (Retained by finder at 6, Sandy Lodge, Sandridge Park, Yate).

F72 WHITCHURCH Bamfield, Maesknoll Old Peoples Home (ST60066878) Finger ring with glass inlay found by Mr & Mrs Davies 1974 (BRSMG: 89/1980, given by finders).

F73 WHITCHURCH Stockwood (ST620680 area)
Alexandrian *tetradrachm* found in field by P Bowden, circa 1969 (BRSMG enquiry, 9.4.69).

F74 WHITCHURCH Between Whitchurch Lane and Charnwood Drive (ST607677 area) Sherds of 3rd-4th century pottery found by I T Boyle 1970 (*AR* 7, 42).

F75 WHITCHURCH Windways Estate, 5, Stoneberry (ST60596720)
Sestertius of Trajan found by R Davies 1979 (BRSMG: 37/1979, given by finder).

F76 WHITCHURCH Windways Estate (ST606672)
Samian base found by Mrs M Wade *circa* 1981 (Inf Mrs Wade).

G– ROADS

G1 BATH - SEA MILLS (Margary 54)
From the city boundary at ST63917258 the road seems to follow the A431 as far as St George's Park (ST62407370). A possible Roman road surface was observed in King Dick's Lane (ST62607359) by H C Shilstone *circa* 1935 (Jones 1946, 12). The exact course of the road through Whitehall, Lower Easton, Baptist Mills and Montpelier is unclear. From ST59057428 the road follows Arley Hill, Redland Road and Elm Lane onto Durdham Down, where traces were visible until 1913 between Westbury Road and the water-tower on Stoke Road. West of the water-tower the cambered surface survives for 200m in good condition; it was sectioned here by A T Martin and others in 1900 (*TBGAS* 23,309-11). From ST56217535 to ST55657576 the alignment is followed by Pitch and Pay Lane and Mariners Path. The 1972 excavations in the grounds of Nazareth House (A1(m)) produced no evidence for the road, and it seems likely that it did not enter the Sea Mills settlement directly, passing instead east of the town along the line of Avon Way to cross the River Trym at ST55257625 (Margary 1973, 138-9).

G2 SEA MILLS – GLOUCESTER (Margary 541)
From the River Trym at ST55257625 the road probably ran north-west to ST54557720, and thence along the line of Kings Weston Road. An alternative route (G2A), more direct but with steeper gradients, follows the north-west bank of the Trym to ST55707730 and thence up Grove Road onto the crest of Kings Weston Hill, where a possible side-ditch was observed in 1966 at ST55317797 (*PUBSS* 13, 47-8). Both routes converge on Kings Weston Road at ST55607860. From here the alignment is followed by a disused lane, the 'Old Gloucester Road' (Seyer 1821, 71-2) surviving first as a terrace and then as a deep hollow-way as far as ST55957902, and continuing as a low bank through the grounds of Henbury Comprehensive School. Crossing the city boundary at ST56307960 the alignment continues parallel with, and north-west of, Cribbs Causeway as far as Hollywood Tower (ST576-08130) (Margary 1973, 140-1).

G3 CHEW VALLEY - (?) ALMONDSBURY (Margary 546)
Having crossed Dundry Hill this possible road alignment enters the city at ST56806735 and is followed by Queens Road, Church Road, Grange Road and Bishopsworth Road onto Bedminster Down (ST57407020). The continuation of this road is entirely speculative. If extended northwards, the alignment crosses the River Avon west of the city centre and is continued by Horfield Road, Cotham Brow, Gloucester Road and Filton Road, crossing the city boundary at ST59857812. Passing along the A38 through Filton and Patchway, the postulated alignment would link with G2 north of Almondsbury (*PUBSS* 9, 159-176; Margary 1973, 140).

A ROMAN SETTLEMENT AT LAWRENCE WESTON

A.J. Parker

A brief excavation took place in June 1982 on a Roman settlement site accidentally discovered at Long Cross, Lawrence Weston, Bristol (ST 544786). Features ranging in date from the late 1st century AD to the late 4th century AD were examined. The site appears to comprise the western side of an enclosed settlement or homestead, bounded by a succession of ditches, walls or fences; within the enclosed area, the surviving late Roman remains consisted of a roughly cobbled open area round an oven or furnace. The main enclosure ditch produced an assemblage of 1st century AD pottery and material indicating a mixed farming economy. Part of the site has been preserved and is available for further investigation; the present report thus gives only summary details of the pottery fabrics and other finds. The finds and the site archive will be deposited at Bristol City Museum, reference 32/1982.

THE EXCAVATION

At the end of May 1982, school playing-fields lying beside St Bede's School in Long Cross, Lawrence Weston, were stripped and levelled by mechanical scraper. Mr J Hunt, subsequently helped by other members of BAARG, searched the site and found Roman material (Fig 1). The annual training dig of the

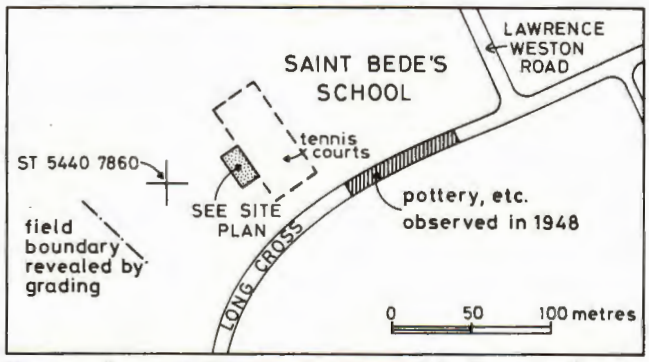

Fig 1 Lawrence Weston: location of the Romano-British settlement excavation, 1982

University of Bristol Department of Classics and Archaeology, due to take place in early June, was rearranged at this new site, and, together with weekend help from BAARG members, an average of 16 students spent two weeks working at the site.

Much of the excavation period was taken up with cleaning features exposed by the machine. At the eastern side of the playing-field, it had left a bank, sloping up to the western side of some asphalt tennis-courts (Fig 2); this was cut back enough to produce a vertical section and expose the edge of undisturbed

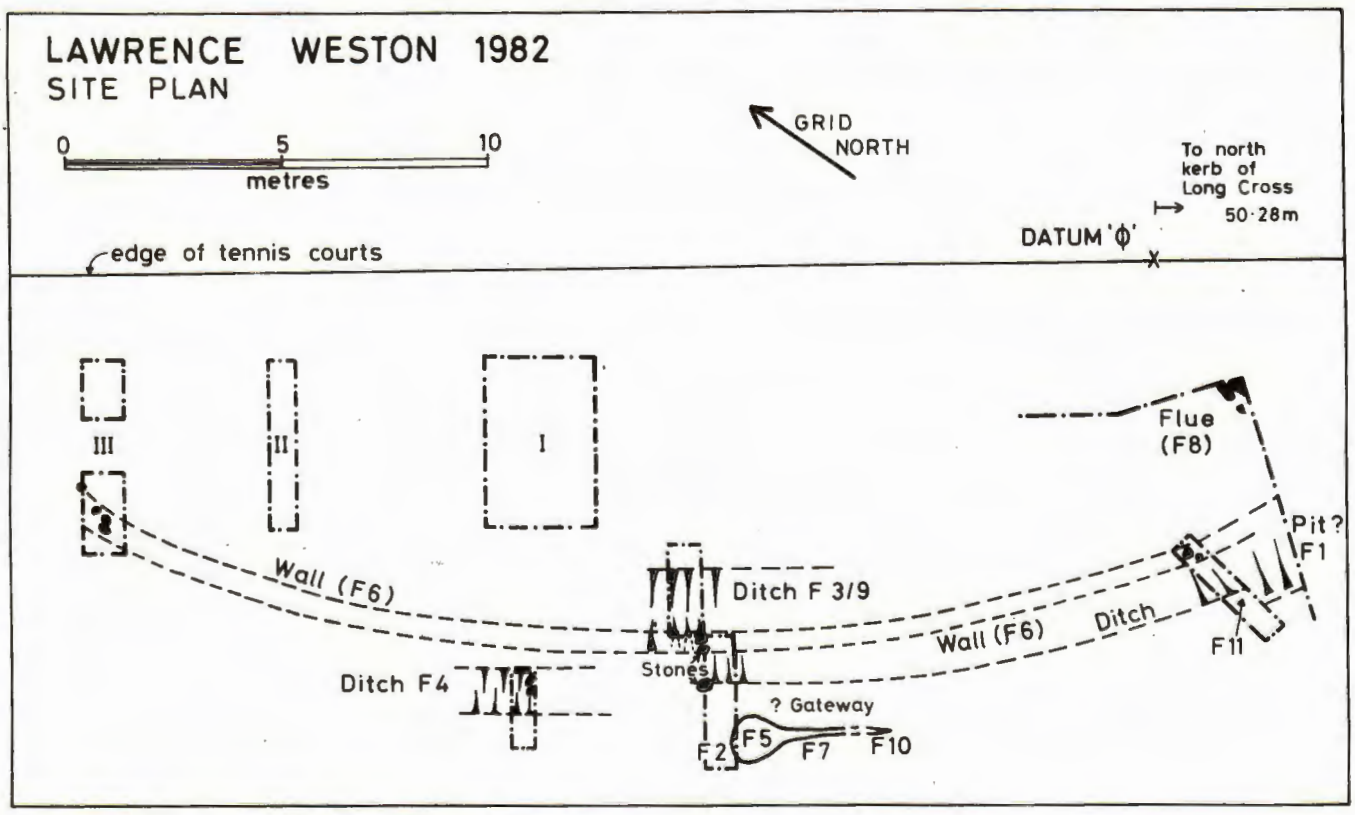

Fig 2 Site plan of the 1982 excavation

the three observable phases of fill indicate that it was open in the late 1st century AD. (2) The fill also included a good deal of black material, some of it wood charcoal including a piece of hazel, but mostly carbonized plant remains (see special reports on sediment samples and plant remains and their interpretation, below). These remains included a good deal of cereal chaff and weed seeds, suggesting that they were derived from a crop, probably of spelt wheat. This waste material was set alight, as is shown by pieces of part-fired clay and non-metallurgical slag mixed with it, and later dumped in the ditch.

The animal bones from the ditch (see special report, below) show that cows and sheeps or goats were also kept on the first-century farm; from the excavated material it seems probable that most of the animals were kept till maturity, but it was not possible to determine their use. Unusually for a Roman site, very few pigs appear to have been kept in this phase; further excavation would be needed to confirm this, but it may mean that the farm was producing animals for a special market (eg. Sea Mills). Other Roman inhabitants represented in the ditch finds were horses, dogs, small mammals, a bird and a frog.

Apart from spelt wheat, the plant remains included oats, barley, one bean (possibly representing a crop), and a variety of wild herbs, shrubs and flowering plants (see special report). The weeds are mostly characteristic of both arable and grassland, though some have a preference for either acid or heavy soils, which implies that more than one type of land was cultivated. Presumably the land in this area was divided into strips at right angles to the contour. In this context, it is interesting to note that there is no evidence for plants of damp habitat.

The trenches cut through the enclosure ditch produced 1.6 kg of pottery, from a minimum of 45 vessels (Fig 5). Thirty two fabric types have been distinguished macroscopically, though the pottery need not have come from that number of different sources (3). Buff and orange wares made up 12%, grey wares 57%, 'native' and black-burnished wares 31%; these represent a variety of traditions, including local pre-Roman handmade pottery, 'Belgic' cordoned bowls, and early 'Severn Valley Ware' of fully Romanized type. Neither the assemblage as a whole, nor individual pieces, are easy to parallel from the published reports on Cirencester (Wacher & McWhirr, 1982), Chew Valley Lake (Rahtz & Greenfield, 1977) and Camerton (Wedlake, 1958). Only 1 piece of (plain) terra sigillata was found, and no coins, so that independent dating is impossible. The Severn Valley Ware appears to be early, *c* AD 55-90 (Webster, 1976), but the other pottery shows general similarities with Chew Valley Lake material of Period 1a, late 1st- early 2nd century AD, and, in particular, Fig 5.9-9a are early forms of types thought by Wedlake (1958, 173) not to predate the 2nd century. This indicates that the enclosure ditch fill must date from the last decade of the 1st century AD.

OTHER FEATURES

Probably at the end of the 1st century, a substantial wall of large stones set in brown clay (F6) was built just to the west (the exterior) of the filled-in ditch. This wall could be traced the length of the site, and clearly served to enclose the settlement, as the ditch (F 3/9) had done previously. A shallow gully, just to the west of the wall, contained pottery

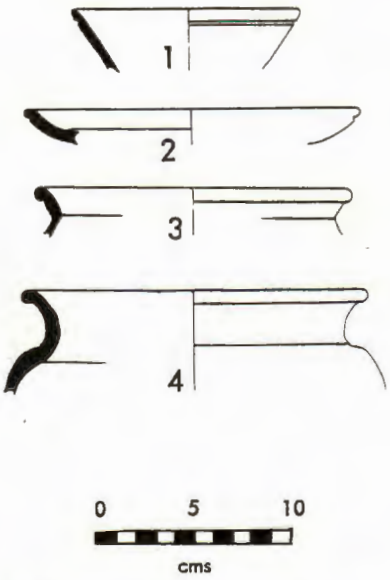

Fig 6 *Late 1st or 2nd century pottery from layer BT: 1, black-burnished ware; 2, burnished red ware; 3-4, grey ware (5)*

probably of the late 1st or the 2nd century (Fig 6). This layer (BT) also produced some slag; metallurgical analysis failed to find anything more than a trace of copper and zinc, so it may not have resulted from metal-working at all (see the special report on the slag, below).

Further south, the wall (F6) was partly cut by a narrow, V-shaped ditch, F11, (cf. Figs 2 and 8). This ditch contained pottery probably of the 2nd century (Fig 7). It ran on a converging course to the wall, but their exact relationship could not be established, owing to machine damage and lack of time.

All these early Roman features continue beneath the late Roman deposits and are preserved under the bank beside the tennis-courts; they are thus available for more excavation at a future date.

THE LATE ROMAN PHASE

At the southern and eastern limits of the excavation, late Roman occupation layers were preserved above the 1st-2nd century features (Fig 8). It was not possible to establish whether the site was continuously occupied throughout the Roman period, or to what extent the early boundaries may have remained in use. To the north and west, only the truncated bottom of (presumably) late Roman features survived. An area of irregular cobbles (F5; cf. Fig 2) lying in sticky, black occupation material perhaps represents a gateway (though no postholes were found). To the south was a slot (F 7/10) which

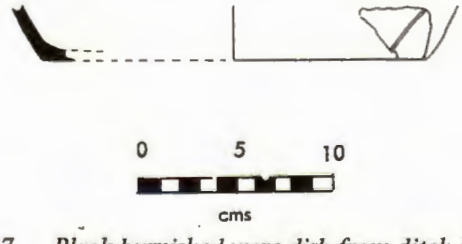

Fig 7 *Black-burnished ware dish from ditch F 11 (layer BV; cf Fig 8) (6)*

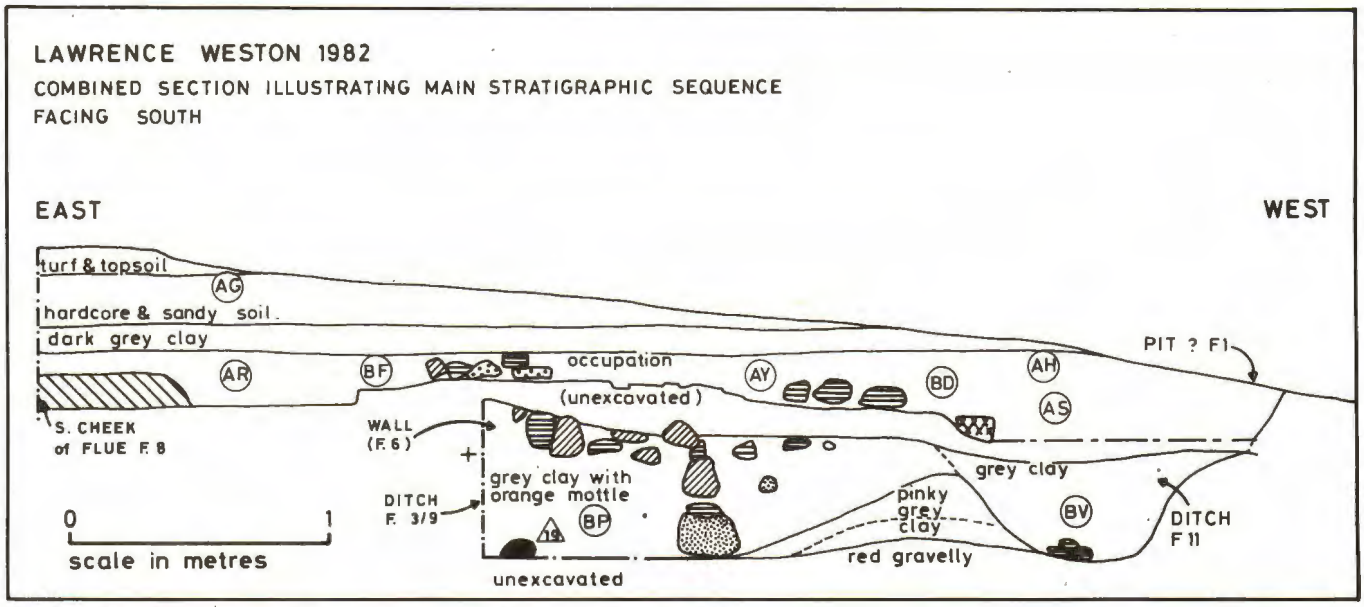

Fig 8 Section through the southern part of the site, showing late Roman occupation (layers AR, etc.) overlying earlier features (excavated in a test trench, see Fig 2)

might once have been a fence. To the north, a gully (F4; Fig 9), three times re-cut, might have been a boundary at an intermediate date, though neither its plan nor its date could be determined in the time available, nor is it clear how it was related to a wall (?), F2.

No Roman features were to be seen west of F2; the grading of the subsoil in fact left the land rather higher to the west of the excavation, so it is probable that F2, etc, represent the limit of the settlement. The supposed gateway (F5) would thus have given on to fields, indeed, some 80m to the south-west, a grey feature, visible as a soil-mark in the graded subsoil, proved to be a shallow ditch, which contained a few Roman potsherds and may thus have been a Roman field boundary (Fig 1). It appears to coincide with a boundary (between the fields named 'The Garston' (in which our site lies) and 'Upper Henbury Paddock') shown on an estate map of 1772, but removed by 1901 (7).

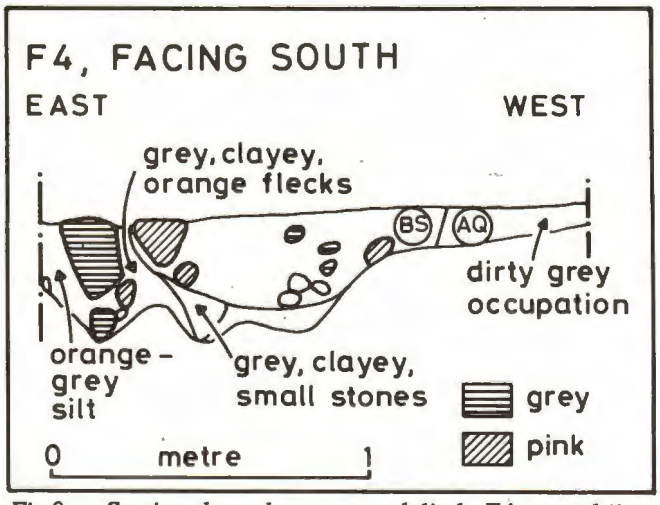

Fig 9 Section through a truncated ditch, F4, several times recut in the late Roman phase

In the eastern part of the site, tennis-court construction and drainage had damaged but not destroyed the late Roman layers (Fig 8). The main feature here was a T-shaped flue (F8) which could not be completely excavated; only the reddened clay cheeks survived, though fired pink stones found all around possibly came from an original superstructure. There was no evidence for the function of this feature; a large area of sooty black occupation to the west of it contained much pottery, but no metal-working or other recognisable waste. Further excavation beyond the limits of the 1982 trench could elucidate this feature.

Other remains from the late phase consisted only of irregular, loose cobbling, representing an open area or yard. Modern disturbance made observation of the latest Roman levels difficult, but in test-trench III (Fig 2) at least there may be a flood deposit over the Roman occupation. Only a handful of post-Roman sherds, probably all from manuring, were found in the upper layers.

Material from the late Roman phase includes two coins, one illegible (but of late 3rd or 4th century appearance), and the other a small bronze, probably a Valentinian I, AD 367-75 (10). Altogether 5 kg of pottery was recovered, from a minmum of 150 vessels, attributed to 45 fabric types. 'Severn Valley Ware' and other oxidised wares made up 17%, various grey wares 14%, and black-burnished and 'native' wares 58%; grey wares were thus significantly less frequent in the later phase. Forms comprise almost entirely dishes and jars; flagons or flasks are lacking. Many layers, and most unstratified areas, produced the odd sherd of terra sigillata and mortarium, and there were a few pieces of amphora. A good deal of this material must be residual, of course. There were imports from Oxfordshire, including a colour-coated bowl, datable c. AD 325-400 (Fig 10.1; Young (1977) Type C 70). Nothing suggests occupation after the end of the 4th century, though that cannot be ruled out. Apart from some nails and whetstones (cf. Fig 10.3), no tools or other equipment were found to indicate the activities carried on in the late phase. There were only two pieces of glass, both residual (see the report on

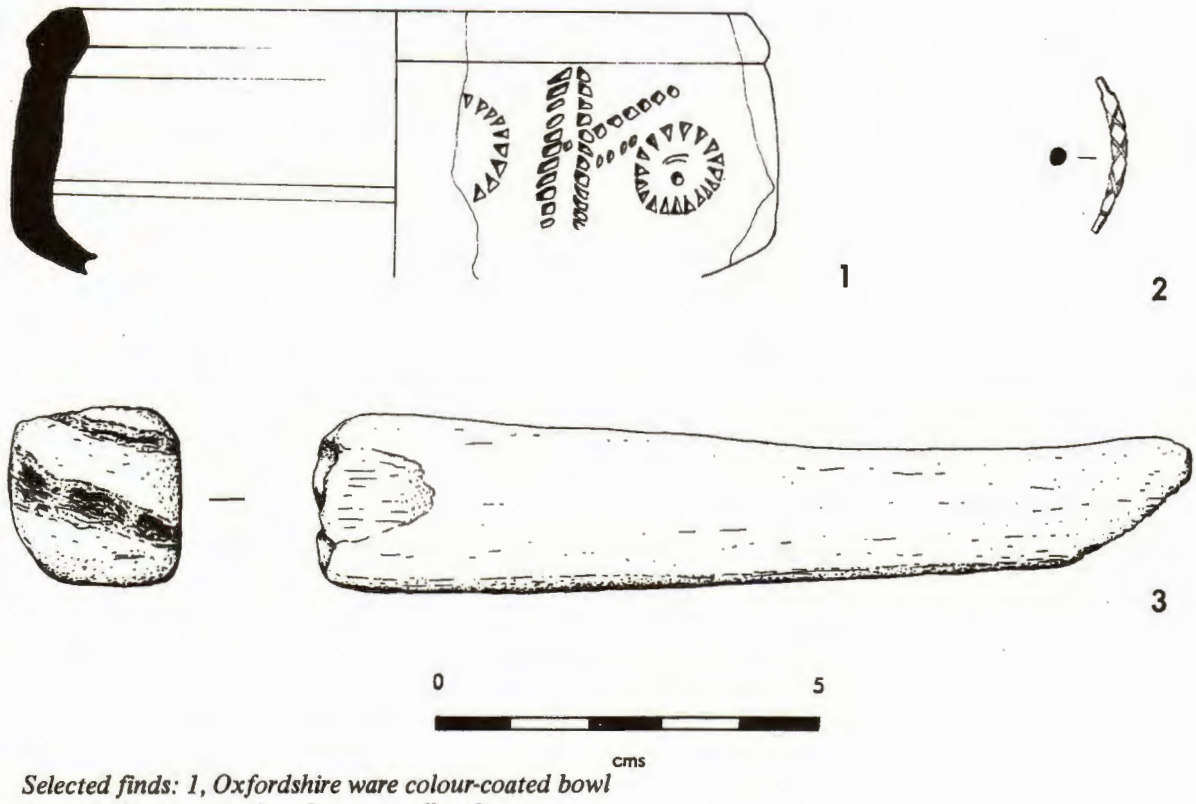

Fig 10 Selected finds: 1, Oxfordshire ware colour-coated bowl from the late occupation; 2, copper alloy fragment, probably part of a toilet implement, from the early phase (8); 3, whetstone (?) of schist, from the late occupation (9).

glass, below). Personal objects were also rare - a piece of a bronze bracelet and a few fragments of pins, as well as fairly numerous hobnails.

CONCLUSION

The Romano-British settlement at Lawrence Weston is one of a dense group in this area; the nearest recorded sites are 400m to the south-west, in Saltmarsh Drive, where Mr Boon observed rubble and ash in June 1948, and approximately 400m to the north-east, where remains of occupation were excavated by Dr and Mrs Everton at Corbett's Close. This spacing may have some significance, since the next site to the south-west after the one in Saltmarsh Drive lies approx. 400m further along Long Cross, and then beyond it another 450m is the villa of King's Weston. There is no reason to link these rural settlements with the villa, though they, too, are conveniently situated on the edge of higher ground overlooking the alluvial flats, on which, as excavations at Crook's Marsh Farm (Avonmouth) show, Roman activity extended well towards the Severn, though possibly only on a seasonal basis. In this scene one may set the Lawrence Weston farmstead; founded, apparently, not long after the garrison at Sea Mills was installed, on a site which had not (so far as one can tell) been occupied intensively before then, the farm exploited a range of soils for both wheat and pasture, and continued probably without interruption until the last decades of the 4th century AD. Although the material from the excavation of 1982 is impoverished, only the outer edge of the farm, it seems, was explored; opportunity may arise in future to return to the site and perhaps excavate the dwellings and other buildings which could be partly preserved beneath the tennis-courts by St Bede's School.

SPECIAL REPORTS

SEDIMENT SAMPLES by Dr M Bell, Dept of Geography, St David's University College, Lampeter

1 *Layer BR* - 880 grams of grey/black clay from the early Roman ditch were sieved. The sample contained a good deal of material derived from human activity, including part-fired clay and a few tiny pieces of non-metallurgical slag probably from the burning of straw. A piece of charcoal from this layer has been identified by N Balaam (Central Excavation Unit) as *Corylus* (hazel). Much of the sieved flot was charred plant material which included charcoal, seeds and charred remains of cereal chaff (see the report below). There was some tiny pieces of mammal bone, mostly unidentifiable (see the report on animal bones , below).

2 *Layer BQ* - 855 grams of purple/grey clay from near the base of the early Roman ditch. Looks very much like a primary ditch fill, consisting largely of weathered sediment of Mercia Mudstone origin. Within the sieved flot there was a small quantity of charred chaff fragments, cereal grains and other seeds. Three small bones (one unidentifiable) were also found (see below).

PLANT REMAINS by Miss P Paradine

Samples received in dry, sorted state; residue sample dry.

1 LAYER BR

Triticum spelta L.	4 grains	Spelt wheat
	60 fragments of glumes, spikelet bases and rachis segments	
Avena sp.	6 grains and fragment of awn	
Avena sp.	Small basal fragment with rachilla	
Avena fatua L.	Small base of caryopsis showing typical horseshoe shaped scar of Wild Oat	
Atriplex patula L.	2 seeds	Common Orache
Asteraceae (Compositae)	1 achene	
Bromus secalinus L.	5 caryopses	Brome grass
Cerastium sp.	2 seeds	Mouse-eared chickweed
Chenopodium album agg	12 seeds	Fat hen
Fabaceae (Leguminosae)	3 seeds, too damaged to identify	
Geranium dissectum L.	4 seeds	Cut-leaved geranium
Hypochoeris sp	1 achene	Cat's-ear
Lamiaceae (Labiatae)	1 nutlet, too damaged to assess	
Mentha sp.	7 nutlets	Mint
Phleum sp.	5 caryopses	Timothy grass
Poaceae (Gramineae) sp.	31 caryopses, most likely *Festuca* sp.	
Rumex acetosella agg	3 achenes	Sorrel
R. conglomeratus Murr.	3 achenes	Clustered dock
Ulex europaeus L.	1 seed	Gorse
Vicia faba L.	1 seed	Bean
Vicia tetrasperma (L) Schreb.	4 seeds	Vetch

2 LAYER BQ

Hordeum sp.	Fragment of grain	Barley
Triticum sp.	Fragment of grain	Wheat
Bromis sp.	Fragment of caryopsis	Brome grass
Chenopodium album L.	2 seeds	Fat hen
Galium aparine L.	1 mericarp	Cleavers
Glechoma hederacea L.	1 nutlet	Ground ivy
Hyoscyamus niger L.	3 seeds	Henbane
Rumex sp.	1 achene	Dock
Poaceae (Gramineae)	6 caryopses, too damaged to identify	

Very many small fragments of *Triticum* sp. rachis, 50% identifiable as *T. spelta* L.

Most of the disseminules found in these samples appear to be relics from the cultivation of cereals and beans, in association with the arable weeds commonly found in such areas. From the evidence seen in these two small samples and those of other sites of this period, it would appear little effort was made to sort out or remove grasses, particularly *Bromus* spp., from the resultant crop.

NOTE ON THE PLANT REMAINS by Miss V Straker, Dept of Geography, University of Bristol.

The relative proportions of cereal chaff and weed seeds to grain would suggest that the burnt material represents waste from a stage involved in crop processing, probably of a crop of spelt wheat with its attendant impurities. During crop processing activities, several stages in the removal of chaff and weed seeds by threshing, winnowing and sieving are necessary to isolate the grain for the required purpose. The chaff and weed seeds removed during this process would be discarded, perhaps used as fuel in a fire and subsequently thrown into the ditch. However, as the exact numbers of the different components of the chaff are not given, calculations cannot be made to test the hypothesis advanced above against models such as that published by Hillman (1981) for the stages involved in the processing of cereal crops. The weed seeds in the assemblages are commonly found on arable land or grassland, though many will tolerate a wide range of habitats (Rose 1981). Some of the species exhibit other, more specific requirements in addition to the general ones noted above. *Rumex acetosella* and *Ulex europaeus* have a preference for acid ground, and *Vicia tetrasperma* flourishes on heavy soils. Although the possibility of the deposit representing burnt thatch cannot be ruled out, thatch is usually composed of the stems of reeds, rather than cereals, and the weed seeds identified are not those of plants from damp communities where reeds would grow, but of arable land or grassland.

ANIMAL BONES by Mr N Morgan, Avon County Community Environment Scheme*

The majority of the bones from the excavation at Lawrence Weston were too fragmentary for a definite identification of species to be carried out, and this must be borne in mind when any conclusions are made on the evidence from the assemblage. Of those bones that were identifiable, there were a total of seven mammal and one bird species present, with two species, namely cattle and ovicaprids, being predominant over the rest. With so many of the cattle being in poor condition, it was not possible for sexing and aging to be carried out to a great enough extent to enable a definite determination of the farming economy of the site to be established. Most bone was recovered by trowelling; a few small bones were recovered by sieving samples from layers BQ and BR (and were kindly identified by B Levitan, Bristol City Museum).

Early Roman phase

Bone from this period was recovered from 10 layers altogether. Five species were present, all of these being domesticated mammals, and approximately 90% of the material came from either cattle or ovicaprids. Although the bones were very fragmentary, there seemed to be little evidence of immature animals during this period, suggesting that cattle and ovicaprids were kept for a longer time than is necessary if they serve no purpose other than meat. The other species present were dog, horse and pig, all represented by very little material. The fact that pig was so scarce in these finds is surprising, since it normally provided a sizable supplement to the diet of people in the Roman period. The horse is most likely to represent a pack or riding animal, as there is no evidence of butchery on any of the bones from this species, although it was not unusual for horses to be eaten in Roman times. Dogs would have been kept as pets or possibly hunting animals.

Late Roman phase

Bone was recovered from 24 layers within the late Roman phase, and a total of six species were identified, 5 mammalian and one bird. The mammals were the same 5 as were present in the earlier Roman finds, namely ovicaprid, cattle, horse, pig and dog. Ovicaprids and cattle again provided the majority of the material, although they did not dominate the finds to such an extent as in the earlier phase. Again, there was little evidence

of immature animals in the material, but the bones were too fragmentary for sexing to be carried out, and it was therefore not possible to determine whether these finds represent dairy herds and flocks of sheep kept for their wool, as opposed to animals kept solely for their meat.

The dog was the third most common animal during this period as far as pure numbers of bones is concerned, but this is not entirely representative since the finds included the major part of a single buried animal (layer CA). The amount of pig bones from this period probably gives a truer reflection of their value as a supplement to the diet than is obvious from the earlier phase. The horse, however, was again poorly represented, possibly indicating that they might not have been readily available to the average small farmer. The one bird bone that was recovered from this phase was incomplete, but was of a comparable size to the domestic fowl.

The remainder of the bone came from unstratified layers, but must include residual Roman material. Amongst these finds were seven mammalian species, namely ovicaprid, cattle, dog, horse, pig, rabbit and a species of deer. The deer was represented only by a small piece of antler.

Discussion

Since the bone material is in such a poor condition, the only evidence that can be discussed is the relative proportion of those species present. In the early phase, ovicaprids were the most important, providing over 50% of the identifiable material. Since there appeared to be few bones from immature animals, it is likely that they were valued for their wool as well as their meat. The cattle, too, came from mainly mature individuals, but, since it was not, possible to determine the sex ratio of the animals involved, one cannot say whether this was a dairy herd. The almost total predominance of cattle and ovicaprid bones in this period is possibly due to the sampling techniques, and it could be that further excavation may prove worthwhile. The finds from the later phase did not exhibit quite such a preponderance of ovicaprid and cattle bones, with these two species between them contributing approximately 60% of the bones. Again, the majority of the bones came from mature individuals, and it seems likely that wool and dairy production is the most probable explanation of their role. Pig was represented by only one bone in the early Roman phase, but by the later period had become more abundant; it is unusual for pig to be so poorly represented in Roman deposits. Dogs were present in small numbers in all phases of the site. The scarcity of bird bones must be a result of the poor state of preservation of bones as a whole from the site; it is probable that the smaller bird bones would have been broken down completely.

List of animal bones froom 1st century layers

AT: cattle: 1 scapula, 2 ribs; *ovicaprid:* 3 teeth, 2 mandible frags, 1 astragalus, 1 calcaneum, 1 phalanx I, 1 radius (proximal), 1 rib.
AX: cattle: 6 teeth, 1 mandible frag, 1 astragalus, 1 phalanx I, 1 pelvic frag, 1 humerus (distal), 1 metatarsal (proximal), 1 metapodial (distal), 1 rib; *ovicaprid:* 7 teeth, 2 scapula, 1 pelvic (frag), 1 femur (distal), 1 metacarpal, 1 metatarsal, 3 metapodial (distal, epiphyses not fused), 4 epiphyses from metapodials, 7 phalanx I, 2 phalanx II, 1 vertebra; *horse:* 1 tooth, 1 metacarpal (proximal), 1 metapodial (distal); *pig:* 1 mandible frag.
BM: cattle: 1 radius (proximal); 1 rib.
BP: cattle: 1 tooth, 1 rib; *ovicaprid:* 1 metapodial (shaft); *dog:* 1 maxilla (frag), 1 pelvic (frag); *horse:* 1 tooth, 2 mandible frags, 1 skull frag, 1 radius (2 frags of same bone).
BQ: frog: 1 tibia; *bird:* 1 humerus (perinatal).
BR: cattle: many skull frags, 1 mandible frag, 1 femur (proximal epiphysis only); *ovicaprid:* many skull frags, 1 mandible frag, 1 scapula frag, 2 tibia, (1 distal, 1 shaft), 1 ulna, 1 metatarsal (proximal), 2 metapodial (shaft), 1 vertebra; *small mammal:* 2 cervical vertebrae, other small fragments: *rabbit:* 1 right calcaneum - in fresh condition, doubtless a post-Roman intrusion.
BU: cattle: many mandible and skull frags.

Bones from other lavers are listed in the archive report.

SLAG by Dr G Nickless, School of Chemistry, University of Bristol

Three samples of dark, slag-like material from layer BT (late 1st or 2nd century AD) were found to be so badly weathered that there was very little metal left. They were examined by differential pulse anodic stripping voltammetry after acid digestion and suitable treatment to raise the pH. The results were as follows:

Sample (SF)	Zinc(μg/g)	Copper (μg/g)
64	28	35
65	44	50
66	21	184

The samples may be, not copper slags, but iron materials, although no iron was found by this technique.

GLASS by Dr J Price, Dept of Adult and Continuing Education, University of Leeds

SF no 85 (layer AY, late Roman occupation). Fragment, probably from the folded rim of a large bottle. Colour, etc., strongly suggest this comes from a 1st-2nd century container, perhaps a square bottle, or possibly cylindrical.
SF no 97 (layer AA, unstratified). Fragment, from the shoulder of a bottle or jar (?). Probably a 1st-2nd century container, though it could possibly be from a post-medieval vessel.

WHETSTONE by Dr P L Hancock, Dept of Geology, University of Bristol

SF no 71 (see Fig 13.3) Mica schist, not local. The nearest outcrops are in south Devon in the Start Point - Salcombe area. Otherwise the Lizard, or Anglesey, could be sources.

ACKNOWLEDGEMENTS

Mr A Huntington (Avon County Estates Department) gave permission for the excavation and agreed to re-soil the site without further levelling of the archaeological remains. The Headmaster of St Bede's School provided a storeroom, and many other people working or living in Lawrence Weston helped in various ways. Mr R Iles (County Planning Department) and Mr M W Ponsford (Bristol City Museum) gave help and advice; the finds were kindly washed and marked by members of the City Museum Excavation Unit. Mr G C Boon, Mrs A Everton, and the late Dr R F Everton visited the site, and generously provided information about their discoveries in the area. Members of BAARG, led by Messrs J Hunt and J Russell, gave invaluable help at weekends. Particular thanks are due to the authors of special reports, especially Dr M Bell for taking samples on-site, obtaining identifications and giving general advice. The published finds were drawn by Mrs J Gill, and the plans and sections were prepared for publication by Mrs J Bees.

NOTES

1 8 March 1974, letter to OS, copy with Avon Sites and Monuments Record. Other documents relating to Mr Boon's fieldwork in the area are now included in the site archive.
2 Layers AT, AX, BM, BP, BQ, BR, BU, BW, BX, BY.
3 The pottery from the excavation has been studied only at a preliminary level. Two series of fabrics (Early and Late) have been defined for the stratified material; no attempt has been made to match pottery from contaminated layers, or to identify any but the most obvious fabrics. Overall, the pottery assemblage shows surprisingly little resemblance to those from other sites (eg. Gatcombe, Butcombe and Chew Valley Lake), a feature that would repay further study.
4 1, fabric E5; 2, E7; 3, E12; 4, E17; 5-6 & 8, E20; 7, E22; 9-9a, E24; 10, E27; 11, SF no 100, E29; 12-15, E28; 16-18, E29; 19-22, E30. Layers AT, BP, BQ, BR, BU, BW, BX, BY. (No 16, from layer BY, has traces of burnished lattice decoration, not shown in the drawing).
5 1, fabric E27; 2, E1; 3-4, E24.
6 Fabric E27. Other pottery from this layer: plain terra sigillata, coarseware strainer.
7 Information (including the 1901 OS 6-inch map) kindly supplied by J Russell.
8 SF no 11, layer AT; for examples from Nettleton, see Wedlake (1982), 219, nos 7-11.
9 SF no 71, layer CA. The thicker end has an unusual scar. For the stone, see the special report below.
10 SF no 9, layer Ap; AE3, Rev. Securitas Reipublicae, cf. Carson, Hill & Kent (1965), II 92-125.

REFERENCES

Carson, R A G, Hill, PV & Kent, J P C, 1965 *Late Roman Bronze Coinage,* Spink & Son

Hillman, G, 1981 Reconstructing crop husbandry practices from charred remains of crops, in Mercer, R, ed., *Farming Practice in British Prehistory,* 123-62 Edinburgh

Rahtz, P A & Greenfield, E, 1977 *Excavation of Chew Valley Lake,* HMSO.

Rose, F, 1981 *The Wild Flower Key,* Warne

Wacher, J & McWhirr, A, 1982 *Early Roman Occupation at Cirencester,* Cirencester Excavation Committee

Webster, P V, 1976 Severn Valley Ware: a preliminary study, *Trans Bristol Gloucs Archaeol Soc,* 94, 18-46

Wedlake, W J, 1958, *Excavations at Camerton, Somerset,* Camerton Excavaton Club

Wedlake, W J, 1982 *The Excavation of the Shrine of Apollo at Nettleton, Wiltshire, 1956-1971,* Society of Antiquaries

Young, C J, 1977 *Oxfordshire Roman Pottery,* British Archaeological Reports

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ROMAN & MEDIEVAL LANDSCAPES IN THE CHEW VALLEY

Richard L. Kemp

The Chew Valley, 15km south of Bristol is a notable area in that it has received much antiquarian, historical and archaeological attention compared with other areas. This has produced a considerable data base but it is still undigested, scattered and in isolated units. This paper attempts to consider whole past landscapes and study them in a temporal context specifically offering hypotheses for the changes between the Roman and the medieval periods. The settlements from these periods are examined in relation to one another and it is suggested that together they form a regular lattice of settlements at intervals of *c* 1km covering most of the lower parts of the valley. The suggestion is made that Roman and medieval settlements are part of the same pattern and that the medieval settlements have undiscovered Roman ancestors. It is also proposed that rather than representing 4th century abandonment excavated Roman sites indicate changes in the settlement pattern occurring sometime between then and the Norman Conquest.

INTRODUCTION

The present paper has been written following the compilation of the writer's undergraduate dissertation for the University of York (Kemp 1983). The original study examined the development of the four parishes of Chew Magna, Chew Stoke, Compton Martin and Stowey Sutton which surround the Chew Valley Lake, an artificial reservoir created in the 1950's.

The area has benefitted from a large number of archaeological excavations, mainly by P A Rahtz and E A Greenfield, in advance of flooding for the reservoir, but also at other times by a variety of scholars. The data in terms of their quality and quantity are good and hence a reasonably clear picture of late prehistoric and Roman landscapes can be ascertained.

The interests of the original work were with the problems of 'continuity' between the Roman and medieval periods and these are the subject of the present work. P J Fowler (1975) offered in his article 'Continuity in the Landscape' the suggestion that in the adjacent Vale of Wrington limited survival of the Roman settlement pattern influenced the medieval landscape (Fowler 1975, 129). This suggestion has been considered in relation to the Chew Valley, which may bear this out. The Roman settlement pattern as we know it from excavated sites is rather irregular, but when this is examined in relation to the medieval settlements a regular pattern emerges. Work of a similar nature has been done by Dr R Leech in north Dorset and south Somerset (Leech 1982). He has suggested that: 'East of the River Parrett the medieval settlement pattern was a relict form of that in the Roman period, with a widely varying density of settlements abandoned at the end of the Roman period'. This is precisely what is proposed for the Chew Valley.

THE ROMAN LANDSCAPE

The Roman landscape is reasonably well understood, probably due to the apparent distinctiveness of things Roman. The valley bottom and its lower slopes are populated with a variety of single farms and small settlements (Fig 1), actively engaged in both arable and pastoral exploitation of upland and lowland resources. Evidence from the Chew Park Villa (Rahtz and Greenfield 1977) suggests a close symbiotic relationship between the valley and the Charterhouse mining establishment on the Mendip plateau. Lead smelting and desilverisation were taking place at Chew Park and roads have been traced that link the villa with the mines to the south and the Roman Port of *Abonae* to the north (Tratman 1962).

THE POST ROMAN LANDSCAPE

The end of the Roman and subsequent post Roman occupation of the valley is by comparison very poorly understood. Branigan (1976) shows that in the west country generally

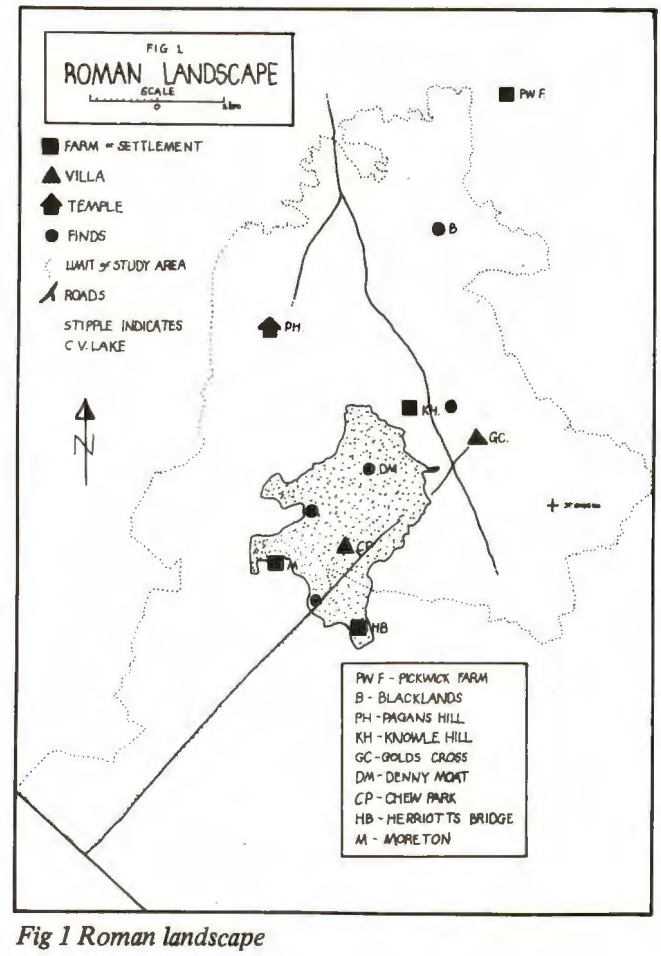

Fig 1 Roman landscape

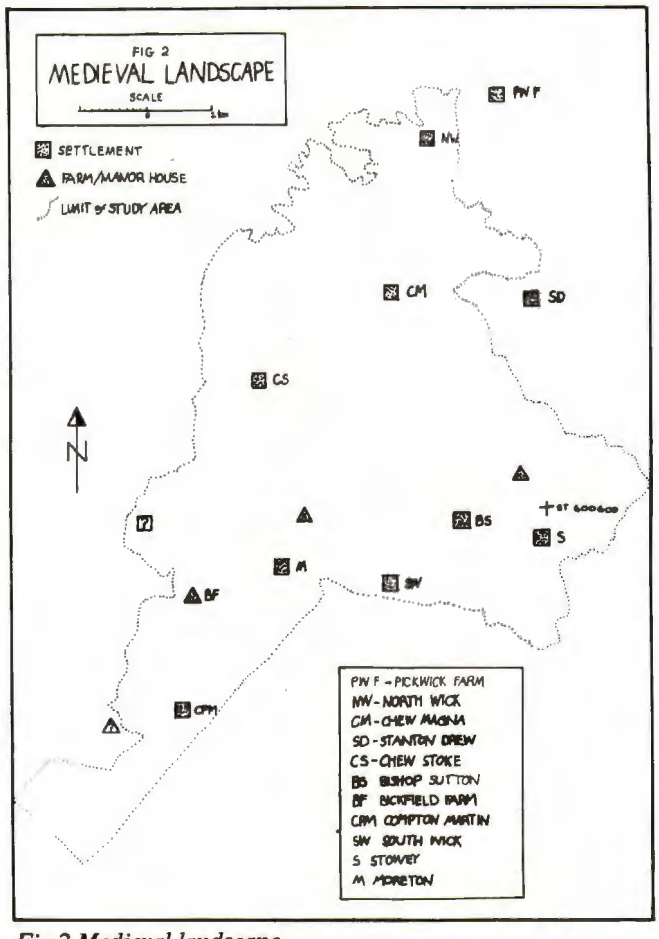

Fig 2 Medieval landscape

villas suffered changes in the nature of their occupation but that occupation can be shown to have continued perhaps into the 5th century.

The lack of coins and mass produced pottery after the late 4th century confounds efforts to even identify post Roman occupation and Rahtz and Fowler (1972) usefully summarise the evidence for Somerset in the period 400-700 AD. In the area now under consideration a few strands of evidence suggest a human presence in the period 400-1000 AD.

Pagan's Hill Roman temple displays evidence for a presence well into the 7th or 8th century (Rahtz and Fowler 1972, 192), and Wansdyke (op cit, 198) passes 1km to the north of the area. Several Roman roads pass into medieval and modern use and it is thus suggested that these remained in use or at least visible.

From Domesday Book it can be suggested that the units of the late medieval landscape were in existence in the late Saxon period at least. Saxon Charters refer to all medieval units of the study area and those circumjacent (Finberg 1964 and Kemp 1983).

THE MEDIEVAL LANDSCAPE

The post-Conquest medieval landscape is much better understood (Fig 2). Five main medieval nucleated villages in the area exist at various levels of modern use but with most containing substantial elements of their medieval fabric, and all containing churches of considerable antiquity (Compton Martin having one of the finest Norman churches in Avon). Chew Magna notably housed the Palace of the Bishops of Bath and Wells. Abundant historical and cartographic data survive to allow a clear picture to be ascertained of parish development and much economic and tenurial information has yet to be exploited fully. Place name research is little advanced for this area and has not been considered in this study, but therein lies another mass of relevant information.

Fuller descriptions of Roman to medieval landscapes are to be found in the original work. What concerns us here is the relationship between the Roman sites (of which we have a good number) with the medieval settlements. What happened between the Roman and Medieval periods?

THE ROMAN AND MEDIEVAL PATTERNS COMBINED.

Examining the Roman pattern in relation to the medieval one (Fig 3) it appears that Roman sites are either directly below medieval ones (Moreton, Pickwick Farm), or they are at least 1 km away. There are no Roman sites nearer than 1 km to a medieval settlement. The only two medieval sites to have been excavated (although neither comprehensively) *both* revealed Roman traces. No other medieval settlements have yet been subjected to any form of archaeological excavation.

When the combined Roman and medieval settlement pattern is viewed a regularly spaced distribution of sites reveals itself with sites at just over 1 km intervals. When gaps appear they seem to be twice this distance suggesting that there *will* be sites that have not been found or have been destroyed without trace. The pattern implies that the medieval settlements are part of a much earlier pattern that may be Roman (or Iron Age or earlier - see Kemp 1983), and that underneath the existing medieval settlements are Roman settlements awaiting discovery. Indeed unless one invokes Geographical Determinism to explain this (see Taylor 1983, 12), the hypothesis also implies that the missing post Roman, pre-Conquest settlements are also hidden under medieval villages.

TESTS FOR THE HYPOTHESES

Some parts of this hypothesis are easier to test than others. For instance the pattern, if accepted as regular, should be able to act as a predictive model for the location of Roman sites in the Chew Valley. There are already some data that suggest the model is indeed worth testing further. In the gap between Knowle Hill Roman site and Chew Park villa (a distance of 2.2 km) a scatter of several hundred sherds of Roman pottery was found at Denny Moat in the Chew Valley Lake campaign (Rahtz and Greenfield 1977, 149-51). This was interpreted as residue left by workers of an outcrop of building stone here. Given the location of the site, however, and the limitations of the excavations carried out here, a Roman settlement site may well have been missed. Other such areas never contemplated have been marked on Fig 3 as in need of close examination.

The medieval moated manor of Bickfield Farm likewise lies halfway between the medieval settlements of Moreton and Compton Martin. This farm may be a relic of the older Roman settlement pattern, a point that would be susceptible to testing through fieldwalking in its vicinity over a period of years.

To establish that (a) the main medieval settlements occupy Roman sites, and (b) that these sites were *continually*

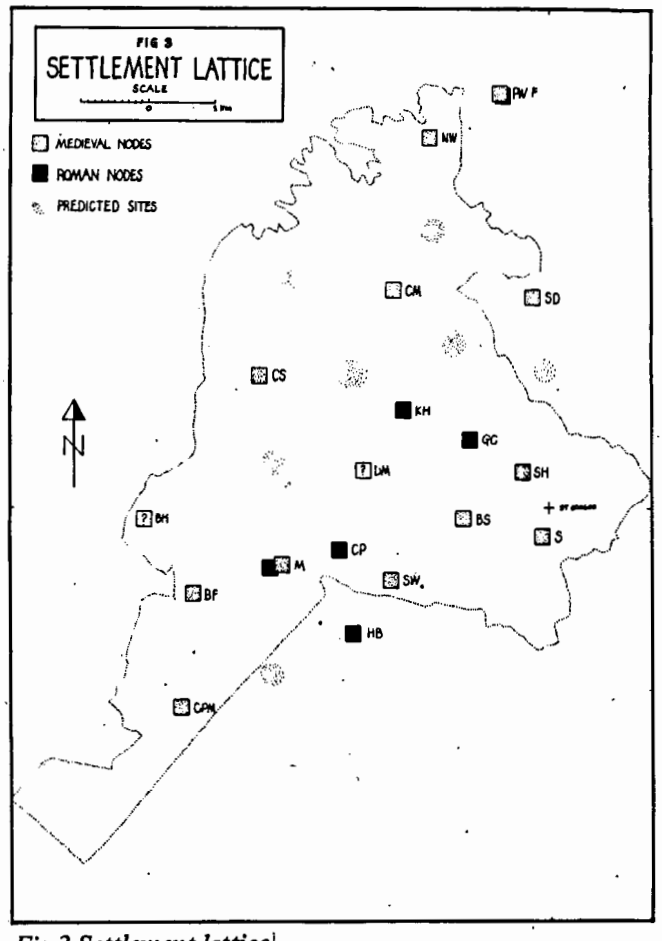

Fig 3 Settlement lattice

occupied throughout this period, are very much more difficult points. The medieval villages of Compton Martin, Chew Stoke and Chew Magna all have thriving modern villages over them and to find the kind of site free from later disturbance will not be easy. A number of sites do, however, reveal themselves as having potential for further investigation into the question of continuous occupation. These are areas where medieval settlement has moved, and which are now fields.

The most obvious site in need of closer investigation is Pickwick Farm, trenched in 1960 by K J Barton (Barton 1969). Not only have medieval structures been found with strong evidence for Roman and Iron Age occupation but the site is also relatively undisturbed. Only the best quality modern excavation need be contemplated, conducted by persons aware of the problems of residuality, and with the sort of resources able to deal with them. Only with these facilities may light be shed on this delicate problem.

The fields around Chew Stoke church may also be an area that might shed light on both the Roman ancestry hypothesis and that of continuous occupation. The fields and earthworks around Stowey church, the earthworks on Breach Hill, the remains of Moreton on the Chew Valley Lake edge and the Bickfield Farm area may prove likewise.

CONCLUSION

Building upon these hypotheses some idea of processes can be suggested from the evidence we actually have. It is a fact that many Roman sites are abandoned well before the Norman Conquest (although exactly when remains somewhat of a problem) - it is also a fact that at least two of these Roman settlemetns did become medieval settlements and it is implied that here the settlements were continually occupied, although there is no direct evidence of this. The fact that the other medieval settlemetns seem to belong to the Roman pattern implies *limited* survival of the Roman infrastructure. This does not actually need to imply shrinkage of population and may represent nothing more sinister than settlement nucleation at some time in the later Saxon period.

The hypotheses outlined here are all in early stages of development but it is felt that the results merit at least continued consideration and it is hoped that fieldwork may now take place in order to clarify what is undoubtedly a very complex situation. The limitation of dots on small maps, settlement mobility (Taylor 1978) and incomplete fieldwork must all be taken into account but these do not reduce the value of this exercise in erecting the hypotheses themselves.

BIBLIOGRAPHY

Barton, K J, 1969 Pickwick Farm, Dundry, Somerset, *Proc Unit Bristol Spelaeol Soc,* 12 (1), 99-112

Branigan, K, 1976 Villa Settlement in the West Country, in K Branigan and P J Fowler (eds) *The Roman West Country* 120-141 Fowler, P J, 1975 Continuity in the Landscape, in P J Fowler (ed) *Recent Work in Rural Archaeology*

Finberg, H P R, 1964 *The Early Charters of Wessex*

Fowler, P J, 1975 Continuity in the Landscape, in PJ Fowler (ed) *Recent Work in Rural Archaeology*

Kemp, R, 1983 *The Chew Basin - the study of a changing landscape,* B A dissertation, Univ of York (copy with Avon SMR)

Leech, R H, 1982 The Roman Interlude in the South West. The dynamics of economic and social change in Roman South Somerset and North Dorset, in D Miles and R T Rowley (eds) *Rural settlement in Roman Britain* - BAR 103

Rahtz, P A and Fowler, P J, 1972 Somerset AD 400-700, in P J Fowler (ed) *Archaeology and the Landscape*

Rahtz, P A, and Greenfield, E, 1977 *Excavations at Chew Valley Lake, Somerset.*

Taylor, C C, 1978 Aspects of Village Mobility in Medieval and later times, in S Limbrey and J G Evans (eds) *The Effect of Man on the Landscape; the Lowland Zone* CBA RR21

Taylor, C C, 1983 *Village and Farmstead*

Tratman, E K, 1962 Some Ideas on the Roman Roads in Bristol and North Somerset, *Proc Univ Bristol Spelaeol Soc* 9, 159-76

THE MEDIEVAL LANDSCAPE OF THE SOUTHERN COTSWOLDS

Rob Iles

The purpose of this article is to identify some features of the medieval landscape in a relatively neglected part of the southern Cotswolds. The Cotswolds have for long attracted the attention of antiquarians and archaeologists. Most previous survey work has been directed towards prehistoric and Roman field monuments, culminating in the survey of barrows by Grinsell and O'Neill (1960) and the report on the Iron Age and Romano-British Monuments by the RCHM (1976). A recent general survey continued this trend (Saville 1980); although it includes medieval sites, relatively few are recorded and those are often misinterpreted[1].

The area under discussion is centred on the linear parishes of Horton, Little Sodbury and Old Sodbury (Fig 1). Strictly speaking this area covers more than the Cotswold escarpment as it follows the areas of parishes which extend down the scarp slope onto the clay vale. Geologically the Cotswolds escarpment is mainly oolitic limestone; the central scarp is of Cotswold sands and Dyrham silts; and the lower ground is mainly lias clays with narrow, north-south bands of lias and carboniferous limestone to the west. The parish of Marshfield is left out of Fig 1 as an intensive archaeological survey of it is being carried out and will be published separately[2].

The article falls into two parts. The first part deals generally with settlement, fields, woodland and manorial features such as parks, warrens and fishponds[3]. Little detailed fieldwork has yet been carried out and virtually no documentary research apart from the examination of early maps for field names. The second part of the article looks in more detail at the parish of Horton and particularly the area around Horton Court.

SETTLEMENTS

The earliest evidence of settlement is the series of hillforts at Horton, Sodbury and Hinton, all situated on the edge of the escarpment. Suggestionsof a hillfort at Hawkesbury Knoll have been discounted by RCHM (1976), although there is a record of an Iron Age pot found there. Further to the south of this area are other Cotswold-edge hillforts at Little Down, North Stoke and Little Solsbury Hill, Batheaston; the linear dyke of Freezing Hill, Cold Ashton, has also been suggested as a possible hillfort. The known hillforts are sited centrally within the later linear parishes[4]. The spacing between the hillforts and the other possible Iron Age sites is generally about 3Km or 6Km apart. Is it possible that the latter implies there are more sites to be discovered? If it does the relationship with the later parish boundaries becomes even more significant.

Comparatively few Roman settlements are known in this area. There are two likely reasons for this. Comparatively little fieldwork has been done here. The recent Marshfield survey has shown that in this area there is a network of Roman farms and hamlets, generally 1Km apart. The second reason appears to be simply that much of the lower ground is pasture or woodland with little opportunity for fieldwalking. Significantly, perhaps, Roman finds have recently come from an area of possible medieval woodland assarting in Horton called Chesters. Evidence for the immediate post-Roman period, as elsewhere in north Avon, is completely lacking, although it does exist as it has been found on five sites in Marshfield. The Roman finds at Chesters, Horton , and the Roman material, found mainly on open field sites, in Marshfield might imply that many Roman settlements were deserted during the post-Roman and early Saxon periods and that some might have been covered by scrub and woodland.

The present day villages have evidence of shrinkage or movement in medieval and more recent times. The best earthwork evidence, at Tormarton, probably indicates that there is a shift as it is still a large village. It might have been due to its being an estate village like Great Badminton which may also have moved slightly away from Badminton House when it was replanned as an estate village. Little Badminton appears also to have been replanned as a result of one of the periodic extensions to Badminton Park.

The villages along the bottom of the scarp tend to be smaller than those on the Cotswolds and it seems that some of them have moved their site, such as Horton and Little Sodbury[5]. Earthwork remains at Hawkesbury may be the result of settlement movement up the hill to Hawkesbury Upton where a medieval town was laid out. In other places the evidence for nucleated settlements is less clear: the situation of the parish church adjoining Doddington House, with no village buildings, might imply that the creation of this large mansion and park swept away any traces of Doddington village. Codrington is often quoted as a deserted village but the main area of earthworks next to Codrington Court was a warren although map evidence shows there are some abandoned house sites to the north. There are also a few house platforms at Hinton. Dyrham, by contrast,appears unchanged since its interesting oval plan was first mapped in 1688.

There is more to the settlement pattern than simply villages in each parish (see Horton below). Several hamlets were laid out around greens as at Kingrove, Coombs End and Colts Green, all in Sodbury parish. West Littleton is really only a hamlet and it is also built around a small green not unlike some deserted examples in neighbouring Marshfield (Westend Town and Brookhouse). Another important part of the settlement pattern are the clusters of cottages and farms around the edges of commons as at Little Sodbury End and Inglestone, Hawkesbury.

The clearest evidence for medieval planning of settlements is to be found in those places granted market charters. Wickwar and Marshfield, both on the fringe of this area, seem to have been laid out as new towns (complete with market places, burgage plots and back lanes) adjacent to

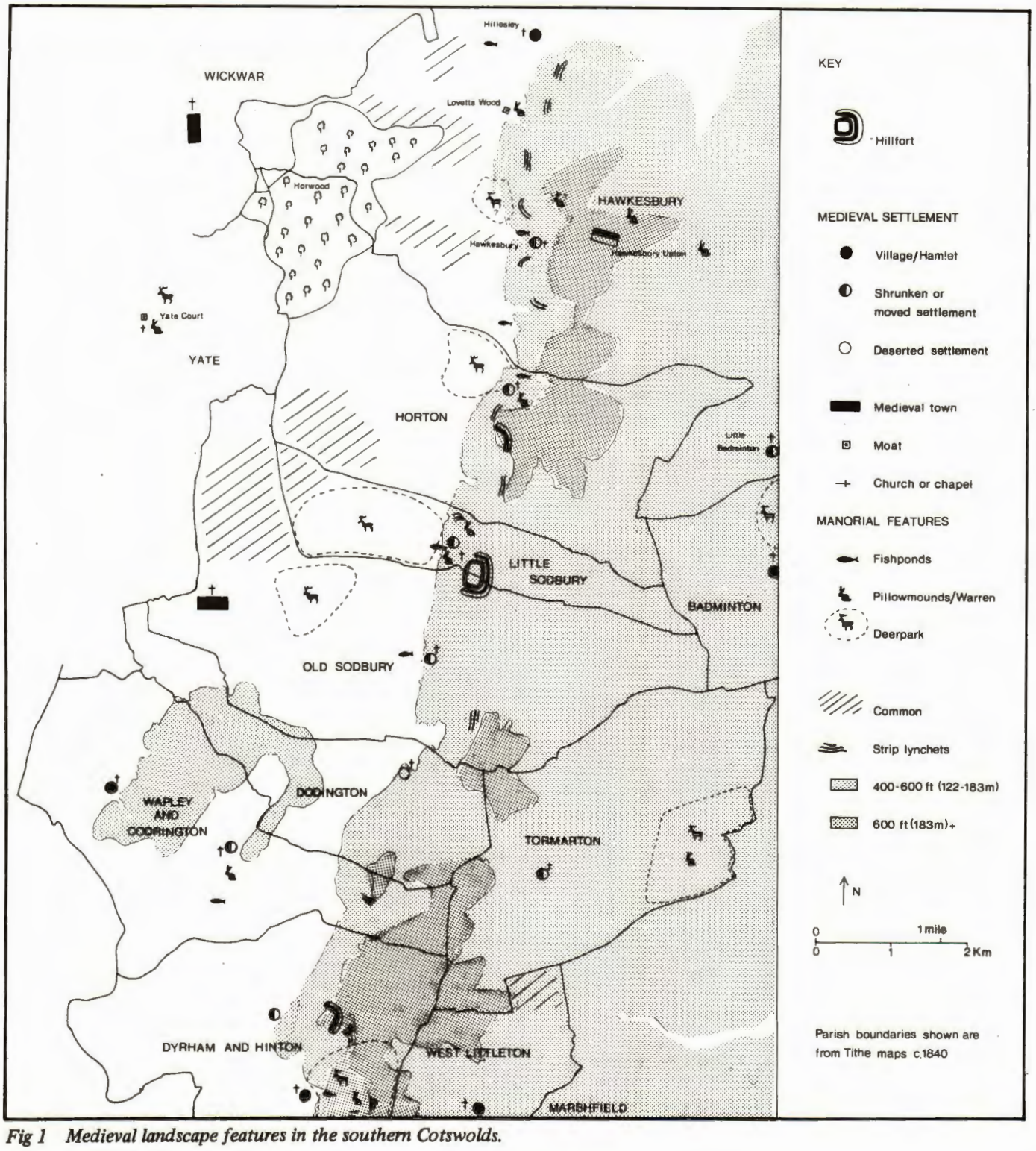

Fig 1 Medieval landscape features in the southern Cotswolds.

existing settlements. Chipping Sodbury, on the other hand, was an entirely new creation on the edge of Old Sodbury parish adjoining a main road. The degree of planning at Chipping Sodbury may have even gone to the extent of laying out a grid of streets (Leech 1975). Hawkesbury Upton already existed when it was granted a market charter in 1252; however, it was badly sited, away from a main road, and consequently failed. The plan of Hawkesbury Upton today shows that an attempt was made to lay out a market town with burgage plots etc. The 'town' was in fact laid directly over the furlongs of an open field and the property boundaries still follow the line of curving arable strips.

FIELDS AND COMMONS

The best preserved remains of pre-medieval fields were on West Littleton Down where they were covered by faint traces of ridge and furrow. Another area of early fields quoted by RCHM(1976) is in Badminton Park, but the evidence there appears to be almost entirely of medieval open fields. In the westerly area they mention the earthworks look like the remains of headlands of furlongs. In other places, as amongst the strip fields in Dyrham Park and the village remains at Tormarton, there are a number of large curious banks and scarps which are possibly the vestiges of early fields.

Generally Cotswold manors had two open fields[6], unlike the vale to the west where three, or even four, open fields were the norm. The Cotswold open fields appear to have carried on longer into the post-medieval period and were possibly more extensive. The open fields of Horton were possibly all on the Cotswold escarpment. A glance at older editions of the Ordnance Survey's 6" maps shows extensive areas of fossilized strip fields on the Cotswold escarpment. Field evidence of ridge and furrow is not uncommon but generally very slight and not easy to see. Some ridge and furrow is preserved in the parkland of Dyrham and Badminton and there are other areas at the foot of the scarp close to Little Sodbury and Hawkesbury villages. Strip lynchets are common all along the steep scarp slopes. Their dramatic appearance probably overemphasises their actual significance for medieval cultivation. In several places, most notably Little Sodbury, there is a direct relationship between ridge and furrow and strip lynchets (Iles forthcoming). The strip lynchets shown on Fig 1 are only a diagrammatic representation of some of the main areas.

Two other features, associated with the fields, are worthy of note. The first are the irregular fields all around Horton Woods, at the western end of the parish, and extending into Wickwar and Hawkesbury. These are probably medieval assarts cleared from the ancient wood of Horwood. The second feature is the numerous and extensive commons still surviving on the western sides of parishes like Hawkesbury and Sodbury. Like the old woodland these commons lie on the lower poorly drained clays. The areas of common shown on Fig 1 are based partly on what exists today and partly on commons shown on the old maps.

FOREST AND WOODS

The western half of this area was in the royal Forest of Kingswood. At its dissafforsetation in 1228 its bounds are described as being between Bristol and Huntingford and between the River Severn and the Ridgeway on Sodbury Hill extending from Lansdowne to Alderley. Moore (1982) discusses the possible boundaries in this area and suggests that they may be Saxon in origin. This locality was a hunting preserve for Saxon kings who had a palace at Pucklechurch.

Not all of Kingswood Forest was wooded but it does seem to have consisted of several areas with a greater concentration of woodland. One of those areas was Horwood, now in Horton parish but originally extending into neighbouring parishes. The area is sometimes referred to as the Forest of Horwood in the 13th century. Although much of the modern Horton woods were clear felled in the past century there are still remnants of ancient managed woodland at Lower Wetmoor in Horton (see p 47) and Bishops Hill Wood, Yate. Certain place-names in the area, like Riding, are indicative of fields cleared from woodland e.g. Horwood Riding in Horton and Mead Riding and Stubb Riding north of Chipping Sodbury.

The Domesday Book for Gloucestershire does not invariably mention woodland but does give a general picture of the woodland for this area in 1086. There seems to have been quite considerable areas of woodland in Hawkesbury, Horton, Old Sodbury and Little Sodbury[7]. By contrast, no woodland is mentioned for the adjacent Cotswold escarpment manors.

MANORIAL FEATURES

Most parishes in this area coincided with a single manor. Two parishes (Wapley and Codrington parish and Dyrham and Hinton parish) both had two manors. Hawkesbury parish is by far the largest parish in the area and is credited with having eight manors by Rudder (1779). However the picture is probably more complicated as other manors, or at least sub-manors, formerly existed. Archaeological evidence suggests that there were sub-manorial complexes at Lovetts Wood Farm and Upper Chalkley Farm in Hawkesbury.

There are manor houses incorporating substantial medieval structure at Little Sodbury manor house, Horton Court and Codrington Court. The manor houses at Great Badminton, Doddington and Dyrham were, of course, rebuilt as large country houses. The manor houses at Hawkesbury and Little Badminton were abandoned and now are buried sites; their most impressive remains are their formal garden terraces (Iles 1984). In the centre of the village at Hillesley was a small ringwork castle, in use from the 11th to the 14th centuries.

These manors would have been surrounded by the economic and social trappings of a medieval estate, notably farm buildings. However, few domestic buildings have survived apart from dovecots at Little Badminton and Codrington Court but no medieval barns[8]. What does survive, and in large numbers, are the earthwork remains of manorial hunting parks, warrens and fishponds.

There were probably at least eight medieval parks in this area (Fig 1). The large numbers of medieval parks generally in Northavon is probably because there was a lot of suitable wooded terrain following the dissafforestation of Kingswood Forest in 1228. Medieval documentary evidence is so far lacking for the parks at Horton and Hawkesbury despite a careful search. The parks have mainly been located from field name evidence. The earliest documentary reference is to a 'parcus' at Sodbury in Domesday. The first references found for Badminton and Tormarton parks are 1234 and 1334 respectively. A licence for emparkment at Dyrham was granted in 1510. It seems likely that Horton and Hawkesbury parks were quite late creations, for like Dyrham, they were close to the manor house; earlier parks tended to be on the fringe of parishes away from settlements and cultivated areas. The usual size of parks is about 100-300 acres, although they did fluctuate in area.

Dyrham's first licence was for an area of 500 acres, about twice the size of the present park. Badminton park, on the other hand, has been extended several times. Further details and suggested boundaries for the parks at Sodbury, Tormarton and Yate have been published (Lay and Iles 1979).

Warrens were relatively common in this area. The warrens shown on Fig 1 are based on evidence of pillow-mounds or field names. Many of these manors were granted the right of free warren but this merely meant that their lords had the right to hunt small game on their demesne land. The warrens themselves were areas of land set aside to intensively farm rabbits, or occasionally hares, as much for their fur as for their meat. There appears to be little dating evidence for the warrens although some were certainly established in the medieval period. Most of these warrens were small and close to the manor house unlike the extensive post-medieval warrens. Not all warrens have evidence of pillowmounds, though presumably all would have had a fairly substantial enclosure. Some pillowmounds are constructed end-on at odd angles and look like a string of sausages. The larger groups of pillowmounds at Dyrham (Iles J and R 1983), Little Sodbury and Horton tend to occur on steep scarp slopes, though this may have improved the drainage -important for keeping rabbits happy - the reason was because that was readily available marginal land with no other obvious use. The warrens at Dyrham and Tormarton were within deer parks, presumably to deter poachers.

Virtually all the fishponds in this area are situated at the foot of the Cotswold scarp, adjacent to manor houses. It seems that spring water issuing from the Cotswold limestone was found to be particularly suitable for use in medieval fishponds. All of these ponds are in a simple series, usually with two or three ponds in a small combe in the scarp. The map of Dyrham of 1688 shows a series of four or five ponds which were later transformed into the magnificent water garden depicted in a Kip engraving (Atkyns 1712); little survives from the 18th century garden apart from the two lower ponds which were in fact merely remodelled medieval ponds. The two ponds south of Codrington Court are contained by stone walls and are possibly 17th century or later in date. In two examples, Dyrham and Hawkesbury, the lowest of the series of fishponds was also used as a millpond.

CONCLUSION

This short article has done little beyond identifying *some* of the medieval landscape of the southern Cotswolds. Ideally it would be most appropriate to continue this study with documentary research to trace the origins and development of these features and land use generally in this area. However, a much more pressing need is to attempt to safeguard and conserve a sample of these features many of which are fast disappearing.

Saville's survey (1980) drew particular attention to the plough damage of known archaeological sites; at the time most damage appeared to affect prehistoric and Roman monuments rather than medieval sites. Only three of the sites on Fig 1 have been ploughed in recent years (the pillow-mounds at Lovetts Wood and Codrington Court and the strip lynchets in Doddington park). The reasons for this are two-fold: first many medieval monumnets have not been identified. Some sitescannowonly be discovered or interpreted from aerial photographs. Secondly known prehistoric and Roman sites tend to be in open-field locations, unlike most medieval monuments which are often in or close to settlements and so not liable to ploughing. However, medieval sites are prone to other destructive agencies, perhaps the most widespread being tipping prior to development. For instance Hillesley fishponds and Lovetts Wood moat have been completely infilled recently; partial infilling has occurred on Tormarton Village earthworks, Codrington Court fishponds and Upper Chalkley Farm fish-ponds. The M4 motorway has destroyed much in this area including the southern part of Tormarton park and the pillow-mounds in Tormarton warren. Many of the fishponds survived because they became covered by trees (e.g. Little Sodbury, Horton and Hawkesbury).

An urgent need for this area, and indeed much of the Cotswolds, is a programme to identify, survey and conserve medieval features as well as the pre-medieval monuments. Indeed a better knowledge of the medieval landscape would help understanding of the survival of earlier features. None of the medieval sites mentioned in this article are scheduled ancient monuments. The Ordnance Survey has done some survey work in this area in the past decade but their surveys are not always complete; most medieval sites have no record at all. A detailed survey must be the first stage in conserving the remains; most farmers are unaware of these sites and providing them with a plan would at least show what there is and its location. The National Trust have taken a lead in building into the management of their estates the conservation of earthworks around Horton Court and Dyrham Park. This has been done on the basis of plans supplied by Avon County Planning Department. The earthworks at Little Badminton and Hawkesbury have been included in Conservation areas. This status does not automatically preserve these earthworks but at least draws attention to their existence.

HORTON PARISH

Horton is a linear parish with its eastern half on the Cotswolds and the western part on the poorly drained vale; in the centre, separating these broad areas, is a steep scarp slope. The modern village of Horton lies on the base of the scarp a mile to the south of the isolated church and Horton Court. In addition there are a number of farms and cottages scattered about the vale. Atkyns (1712) gives a succinct account of the land use in his time: 'It consists of arable above the hill, and of rich pasture below; large commons and some wood.' Apart from the enclosure of the commons (Fig 2), mainly done by Act of Parliament in 1815, there was little change between 1712 and the Tithe Award of 1840. How far back can this arrangement be traced and what changes have taken place?

A grant of land at Horton was made to Pershore Abbey in 972 (Birch, *Cartularium Saxonicum*, No 1282, III, 585, quoted by St Clair Baddeley 1898). It amounted to 10 hides (the same area as the Domesday manor) and was said to be chiefly woodland. At the time of Domesday the manor was in lay hands but was given to Salisbury Cathedral in 1125 to endow a prebendal stall. Both Atkyns (1712) and Rudder (1779) have assumed there was a second medieval manor as some land there was owned by the Bradestones of Winterbourne and their descendants in the 15th century; they had two messuages. However it is

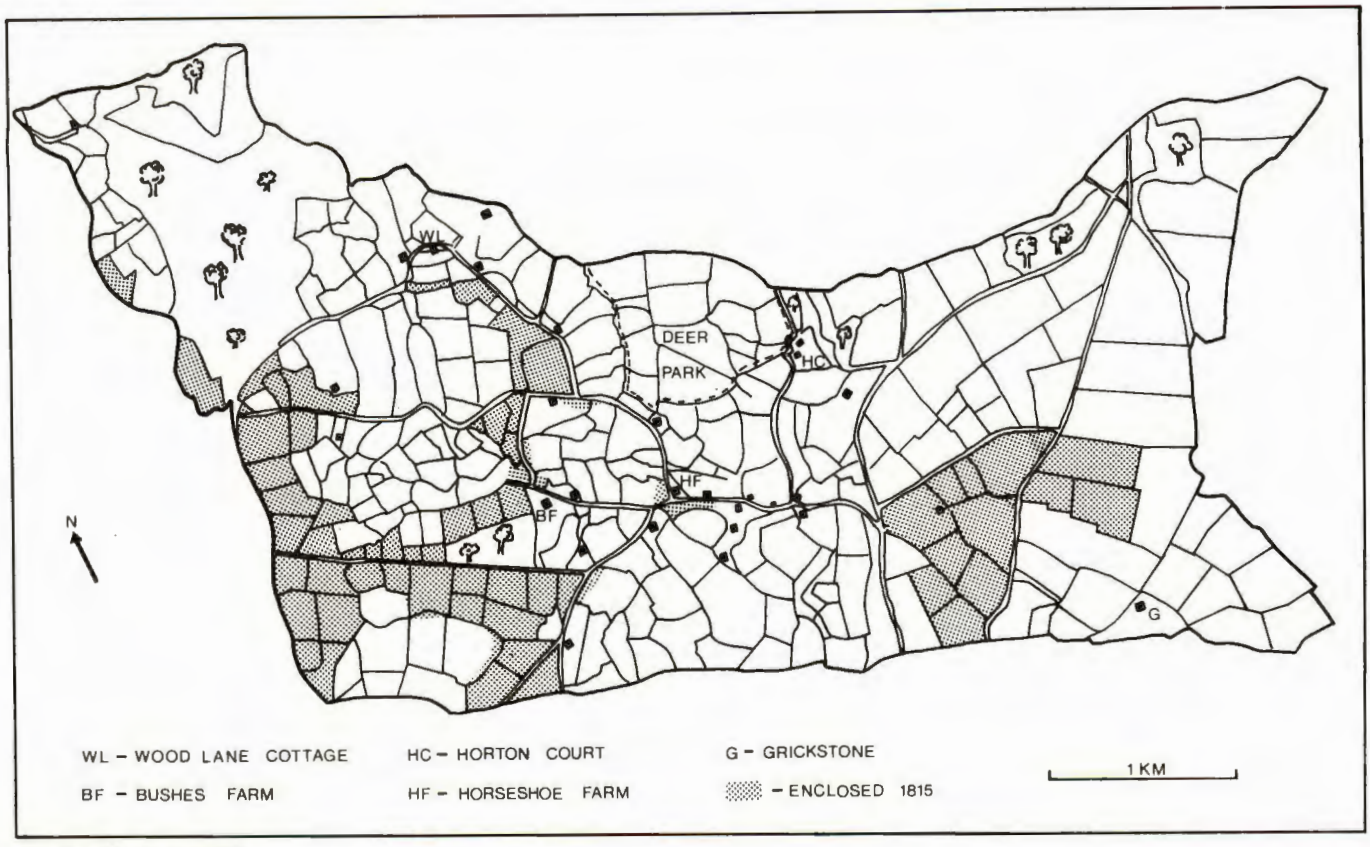

Fig 2 Horton parish

not certain there was a separate manor but there does seem to be some separate landholdings in the parish. The prebendary was dissolved in the mid 16th century and the manor came into the hands of the Paston family, who only came to live at Horton Court in the early 18th century although some members of the family may have lived there from the 1660's. The Pastons were Catholics and their estates are described in a 'Register of Popish Estates' made in 1717 (GRO Q/RNc1).

The development of settlements and the pattern of land use is more complicated than might at first appear. It seems from the evidence of earthworks that there was a hamlet around Horton Court and church originally (Fig 3). Why the focus moved to the present small village may be linked with changes in the layout and importance of roads in the parish. There are several abandoned roads leading up the scarp linking the vale with the hill including some by Horton Court. The only tarmaced road now leading up to the higher part of the parish is the one along which themodernvillage is built.

The fairly randomly distributed farms in the vale probably reflect an old pattern of land clearance and assarting from Horwood. Many of the existing farm names are recorded in the 16th century or earlier *(Gloucestershire Place Names* III, 36-7). Of the houses that Linda Hall has surveyed in this area three of them, Wood Lane Cottage, Bushes Farm and Horseshoe Farm are medieval. Bushes Farm had a large hall and was probably a house of some importance. Wood Lane Cottage is unusual in being the only complete example of a timber-framed house outside of a town in north Avon; good building stone is abundant locally but so also was timber. Some of the cottages dotted around the parish are probably a more recent development in the settlement pattern, namely squatters' cottages on the edge of commons. In the 1717 survey there are some 31 cottages described as being on waste ground or common.

Gray (1915, 90) quotes a survey of Horton made in 1548. At that time the manorial tenants held some 980 acres of arable land (this area is just slightly less than the area of the hill), of which 302 acres were enclosed. Gray goes on to describe the uncertainty surrounding the number and names of the open fields:

> Mershe field[9]. and Yarlinge field are clear enough, but there is an 'Infield et alius campus vocatus Ynfield.' Careless spelling may be responsible for the separation of 'Endfield' from the latter. Whatever the identifications, there is no trace of a three-field arrangement in the virgate holdings, and a two-field one is problematical. Three virgates divide their open field between Yarlinge field and Mershe field disregarding other fields. If In field can be joined with Mershe field and the 'great felde' with Yarlinge field, other virgates can be subdivided according to a two-field system; but others cannot, one lying entirely in Mershe field.

By the time of the 1717 survey some furlongs and strips still survived; some arable land on the hill was enclosed in the 1815 enclosure Act along with the commons. The 1717 survey also describes Grickstone Farm as having several *new* enclosures of arable, presumably lands taken out of the open field. It seems unlikely that the open field extended down onto the vale, but there are some strip lynchets on the scarp slope.

The vale had three main land uses and one small part used as a deer park. The first land use was woodland which may have been predominant in the early medieval period.

Fig 3 Earthworks, Horton Court

The other two elements of this land use pattern are the commons, all now enclosed in Horton parish, and small irregular fields. The small fields, adjoining Horton woods and in the central part of the vale, look like typical woodland assarts set in a landscape of winding lanes and scattered farms. Documentary records have not been searched to prove this but there is one group of fields called Horwood Riding. Another set of fields in this area is called Chesters and Roman material has been found there recently. One possibility is that this area was abandoned soon after the Roman period and natural woodland was allowed to regenerate.

The area of common land can be gauged to some extent from the area of the vale enclosed in 1815 (Fig 2). There is a much earlier Enclosure Act for Horton dated 1668; the purpose of which was to enclose part of the waste of the manor to grow timber. It is noticeable today that some of the common land on Inglestone Common, Hawkesbury, has natural regeneration of small trees and scrub.

EARTHWORKS AROUND HORTON COURT

Horton Court and church are built on a slight rise in a combe in the Cotswold scarp. They are surrounded by many earthwork remains of a crowded medieval landscape. They include numerous trackways and settlement remains, a 16th century garden, a warren, fishponds and a hunting park. Most of these features lie on land, which like Horton Court, belong to the National Trust.

Horton Court includes a late 12th century wing which is often quoted as a rare survival of a Norman secular building. Its very close position next to the church, which is late medieval in date, raises the possibility that it may have been an ecclesiastical building originally. Most of Horton Court was built for William Knight, a prebend in the first half of the 16th century. He was a civil servant to both Henry VII and Henry VIII and later, in 1541, became Bishop of Bath and Wells. As a civil servant he worked abroad, mainly in Flanders; he went to Rome in 1527 for the negotiations with the Pope over the divorce of Catherine of Aragon. His additions to Horton Court are fairly traditional apart from the very elaborate front door surround and the chimneypiece in the entrance hall, both covered in Renaissance ornament. Over the chimneypiece is the inscription 'Willhelmus Prothonotarius Ano 1521' which, according to Hussey (1932) was formerly set in a garden wall. To the south of the house, and detached from it, is an ambulatory (d on Fig 3). It is a covered walkway, oepn on the west side. It is said to be modelled on an Italian loggia and has four medallions of Roman emperors' heads on the interior wall.

After the prebendaryship was dissolved by Edward VI Horton manor passed into the hands of the Paston family. The family only came to live there permanently in 1707. They were Roman Catholics and they had a chapel built into the upper part of the Norman hall. About a century ago Horton Court was rather over-zealously restored. It was given to the National Trust in 1946 by Miss Hilda Wills.

In the survey of the Paston estate made in 1717, the following is included in their list of property at Horton: 'the mansion house called Horton Court, together with outhouses, courts, gardens, orchards, fishponds, barns and yards thereto belonging with several enclosures called Fishponds Leaze, Little Conigree, Churchmead, Meadparke, and Rowparke.'

Immediately to the south and south west of the Court are the remains of a formal garden layout. It consists of six rectangular terraces on different levels and linked by paths and stone steps. Some of the terraces are surrounded by stone walls, others just by grassy scarps. The date of the garden is not known but it is likely that at least some of it dates to the first half of the sixteenth century, when Knight was rebuilding the Court. The ambulatory, also of that period, is aligned with the garden terraces. If these remains are as old as the ambulatory they must be one of the earliest examples of a Renaissance garden in England.

There are numerous abandoned trackways in the fields surrounding Horton Court. The only metalled road in the area runs roughly north-south along the spring line below the Cotswold escarpment. However, there are three former tracks that run east-west from the Cotswolds down the scarp on to the vale. There are three areas of probable deserted settlement remains. The main area (a on Fig 3), to the east of Horton Court, lies adjacent to a track coming down from the Cotswolds; it consists of a series of irregular terraces, cut into the gentle slope of a combe, with several possible house platforms. The second area (b on Fig 3), to the east of Horton Court, is a fairly amorphous group of earthworks. In the field to the north east of these are a number of enclosures bounded by shallow ditches which are probably for drainage. In the third area (c on Fig 3), further to the west, are a linear group of four irregular platforms, up to 1.5m high, and situated on the edge of a trackway skirting round the southern boundary of the deer park. It is not known when these small clusters of houses were abandoned. The reason for their desertion may be a change in the local road network.

To the north east of Horton Court are a series of at least three fishponds. The southern one, close to the Court, is still water-filled and was widened and lined with bricks about 50 years ago. This pond also contains an island but it is not known if it is original. There seems to have been another island in the lower pond; it lies across the pond but appears too low to have been another dam. The main retaining dam of the upper pond is over 3m high and is used as a trackway. The ponds themselves are fed by a spring which issues just above the upper pond. There is a leat around the lower two ponds on the east side, in a field called Fishponds Leaze on the Tithe Award. The lower two ponds are now in a small wood. There is a small bank to the west of the ponds and beside the road. This may have been part of an enclosure around the fishponds to deter poachers.

The warren probably occupied all the steeper ground to the north east, east and south of Horton Court. There are six pillowmounds in this area (p on Fig 3) and all but one lie at right angles to the contours. They vary in length from 30m to 100m and are generally about 0.5m high with small shallow side ditches. The longest pillowmound, in the field to the south, has slight traces of cross indentations; that field is called Conygres on the Tithe Award. The warren seems to have been bounded by a lynchet, higher up the slope, in the fields called Conygres and Fishponds Leaze. There are also a series of strip lynchets to the south. The 1717 survey does not mention a warren here but does record a field name, Little Conigree, which would imply that it had already gone out of use. There is a reference to a 'le conigree' in 1575 (*Gloucestershire Place Names*, III, 37).

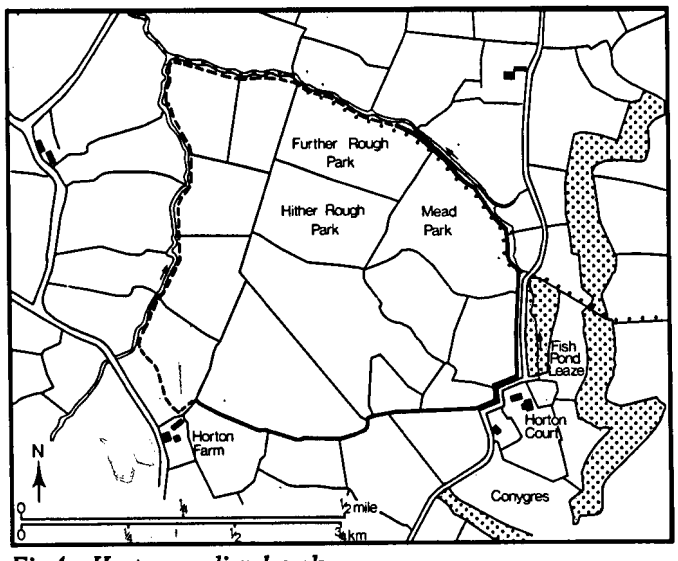

Fig 4 Horton medieval park

It is likely that there was a medieval hunting park to the north west of Horton Court (Fig 4). I have not been able to find any documentary references to it but there are a group of 'park' field names (Further Rough Park, Hither Rough Park and Mead Park) on the Tithe Award, in the north part of the park. It was obviously disparked by 1717 as the survey of that date records two fields called Meadparke and Rowparke. The boundary of the park can be traced on all but the west side. The most substantial section is on the north east side where there is a massive bank and ditch. On the south side there is a broad bank 0.5-1m high with a holloway on the outside. The boundary of the park on the west side probably followed the Little Avon river.

ACKNOWLEDGEMENTS

I would especially like to thank David Thackray and Anthony Mitchell, Archaeological Secretary and Historic Buildings Representative of the National Trust, for their help in arranging the surveys at Horton and Dyrham and their continued interest. I am also grateful to June Iles and Susan Lay for their assistance with research on Dyrham and Hawkesbury, and Bob Sutcliffe and James Edgar for helping with the survey at Horton.

NOTES

1. For instance in Saville (1980) Site 636 (Doynton) is identified as a deserted village but is a series of fishponds and mill. Another example is Site 878 (Codrington), described as miscellaneous earthworks, was a group of pillowmounds.
2. The survey is being carried out by Avon County Community and Environment Scheme for Avon Planning Department. The work has been directed by V Russett and should be published shortly.
3. Details of grid references and other information for sites on Fig 1 can be found with Avon Sites and Monuments Record in the County Planning Department.
4. The parish boundary between Little Sodbury and Old Sodbury cuts across Sodbury Camp. Although both existed as separate manors in 1066 they were presumably one unit originally.
5. Little Sodbury was listed as a deserted village in Beresford's original list (1954) although most of the earthworks are ridge and furrow and pillowmounds. However, the situation of the manor and old church well above the new church and surrounded by newer village buildings suggests that the focus has shifted down the hill.
6. Tormarton, Badminton, Acton Turville, Hawkesbury and Hinton all had two open fields. Marshfield seems to have been an exception with three.
7. Woodland area in Domesday is measured in terms of leagues or furlongs, unfortunately it is not known how long a league was. Horton and Hawkesbury were both described as having woods 2 leagues by 1 league. Old Sodbury had woodland 1 league by 1 league and Little Sodbury, a relatively small parish, is described as having a small amount of woodland.
8. However one large out-building at Codrington Court has a late medieval roof.
9. Mershe field is the only open field which can be traced on the Tithe in the form of Marsh.

REFERENCES

Atkyns, R, 1712 *The Ancient and Present State of Gloucestershire*

Beresford, M. W, 1954 *Lost Villages of England*

Gray, H L, 1915 *English Field Systems*

Hussey, C 1932 Horton Court, Gloucestershire, *Country Life*, Jan 30, 122-127

Iles, J & R, 1983 Note on Dyrham Park, *Bristol Avon Archaeol*, 2, 53

Iles, R, 1984 Lost Paradise Found? *Avon Conservation News*, 19, 3-5

Iles, R, forthcoming Little Sodbury earthworks, *Bristol Avon Archaeol*

Lay, S & Iles, R, 1979 Medieval Parks in Avon, *Avon Past*, 1, 5-12

Leech, R, 1975 *Small Medieval Towns in Avon*

Moore, J, 1982 The Medieval Forest of Kingswood, *Avon Past*, 7, 6-16

O'Neill, H E, & Grinsell, L V, 1960 Gloucestershire Barrows, *Trans Bristol Gloucestershire Archaeol Soc*, 79, pt 1

RCHM (England), 1976 *Iron Age and Romano-British Monuments in the Gloucestershire Cotswolds*

Rudder, S, 1779 *A New History of Gloucestershire*

Saville, A, 1980 *Archaeological Sites in the Avon and Gloucestershire Cotswolds*

St Clair Baddeley, 1898 Note on a visit to Horton, *Trans Bristol Gloucestershire Archaeol Soc.*

THE EARTHWORKS OF AN ANCIENT WOODLAND

George Hendry, Nicola Bannister & Judith Toms

Banks and ditches, mounds and depressions are commonly found in long-established woodlands. Outline descriptions of such earthworks have been published but largely from woods in East Anglia and South East England (Jenns 1968; Tittensor 1978; Rackham 1976, 1980). An understanding of woodland earthworks in East Anglia has been possible whereever details of past management practices have been available.

However, in the West Country, outside the Forest of Dean, little has been published either on earthworks or on past management. Recently an unusual opportunity to examine the earthworks of an ancient Wessex woodland was provided by the owners, the Gloucestershire Trust for Nature Conservation. In addition, management records from neighbouring owners were made available. We report here the findings of a survey and excavations conducted between October 1982 and May 1983, interpreted in the context of written records from adjoining woodland estates.

THE SITE AND PHYSICAL BACKGROUND

Within the 300 ha Lower Woods, near Wickwar, Avon lies the 20 ha of the Wetmoor Nature Reserve. The Reserve is composed of two woods, known as Lower Wetmoor (13 ha) and the adjoining Little Bath Riding (2.4 ha).

The Saxon name for the area, Horwudu or Muddy Wood, aptly describes the surface-water gleyed clay soils of the Reserve. Poor drainage, heavy clay and difficult access have long impeded commercial exploitation. The Reserve soils, of the Denchworth series, are relatively uniform with a pH of 4.8 to 5.8. Only on the north side, on the terraces above the Little Avon River, is there good natural drainage with surface soils of alluvial detritus overlying calcareous deposits with pH ranges of 6.0 to 7.2.

The greater part of the Reserve lies on a plateau at an altitude of about 80 m with a south-to-north gradient of 1-3°, falling steeply to 60 m at the Little Avon River.

BIOTIC BACKGROUND

Lower Wetmoor is described ecologically as a coppice-with-standard damp oakwood. The dominant mature tree is oak *(Quercus robur* and *Q petraea)* with isolated ash, birch and wild-service tree, with stands of alder by the Little Avon River. The coppice consists of large, well-developed hazel stools, with occasional field maple and ash. The field adjoining Lower Wetmoor and Little Bath Riding is species-rich and has all the indications of a long-established permanent pasture. The unusually rich and diverse compo-

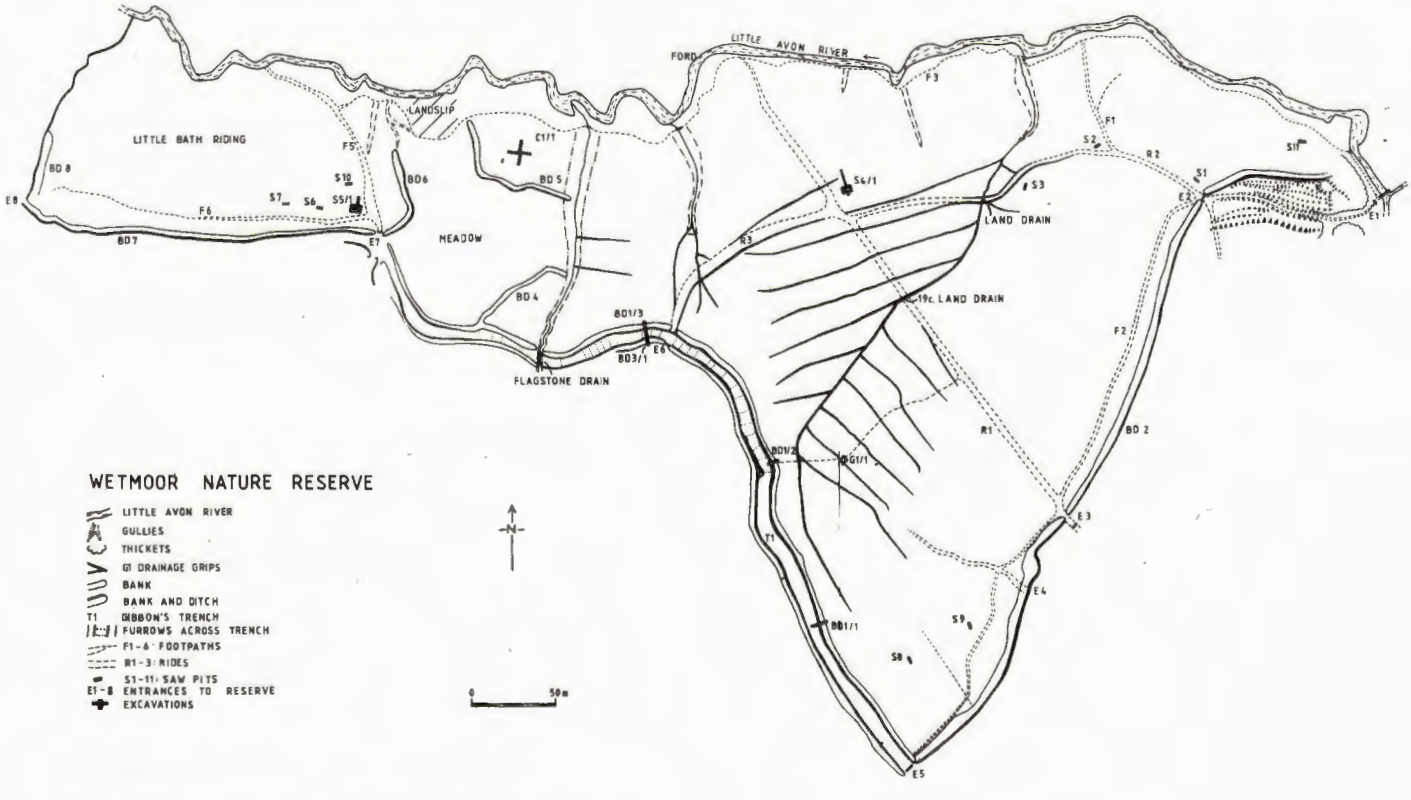

Fig 1 Map of survey area showing principal earthworks

sition of the Reserve wildlife (see Hendry 1980) confirms that this is ancient woodland managed for centuries by traditional means.

HISTORY

In Saxon times Lower Woods appears to have formed part of an extensive area north of Bristol known as Kingswood (Moore 1982). A charter of 778 records gates and boundaries to woods 3 to 6km south-west and north-west of Lower Woods. By 946 Kingswood had acquired active royal connections with the death of Edmund at his palace at Pucklechurch. Kingswood, including Lower Woods, was maintained as a royal forest throughout the Norman ascendancy until 1227-1230. The 1086 Domesday survey omits detailed reference to the forest but notes the existence of a wood two miles long and one mile broad in Grimboldeston Hundred. It seems likely that this was Lower Woods, a similar-sized wood being noted in maps of Saxton (1577), Speed (1610), Taylor (1777) and in the Ordnance Survey of 1811. The conclusion is that Lower Woods, including Wetmoor, have altered little in size in the last 1000 years.

After disafforestation (*c* 1230), Lower Woods passed through successive Lords of the Manor of Horton until granted in 1552 to Sir Clement Paston (Gloucester Record Office). A 1715 inventory of the Paston Estates specifically records Lower Woods coppice. The explicit reference to coppice, in this context, refers to management and is evidence that the woodland structure of hazel coppice, probably beneath oak, existed in the 17th century as it does today. Shortly after 1870 the Horton Estates passed to a neighbouring landowner, the Earl of Liverpool. In the several charters, deeds and inventories over the 900 year period, there are no references to significant clearances within Lower Woods. The adjoining clearance or assart, Horwood Field with Horwood Trench, was being rented for grazing by 1840 and similar references in the Badminton Estate papers suggest the presence of relatively small clearances by the mid-19th century. In 1940-1943 most of the oak timber trees in the area were felled for the war effort, by the New Zealand Forestry Company, leaving the coppice intact. However, the oaks in Lower Wetmoor and Little Bath Riding (the survey areas) were not removed.

PAST MANAGEMENT

Information on past management practices can prove useful in the interpretation of woodland earthworks. However, management records for Lower Woods appear to be restricted to (a) those of the Beaufort family (Badminton Estate papers) whose holding in Lower Woods lies immediately north of the survey area across the Little Avon River, and to (b) the Liverpool family holdings in the neighbouring parish. Caution is needed in extrapolating from the practices of one woodland estate to another. In particular, Lower Wetmoor (the survey area) lies south of the Little Avon River where timber extraction and general access is likely to have been considerably more difficult than in the Beaufort Estate areas north of the river. Nevertheless, the Beaufort records of 1770-1850 show delineated areas, or coupes, which were coppiced on a regular 16-19 year cycle. The coppice composition, sold as a standing crop, was largely hazel. Likely uses include wattle for house building, hurdles for sheep folds, material for baskets and panniers, hoops for buckets and barrels and substantial quantities for firewood. By 1800, the oak standards, felled as maturing trees, appear to have provided pit props, oak bark for tanning, coopers' staves, posts, rails and again, fuel.

Mid-19th century duties of the Beaufort and Liverpool Estate woodwards specifically included drainage ditch construction, digging holes for saplings, sapling planting, digging, breaking up and hauling stones for woodland trackway repairs.

Within Lower Wetmoor there is clear evidence of linear tree planting. Ring counts give a planting date, for most trees, of 1870 to 1890 coinciding with the early years of the Liverpool family ownership. Older trees dating to 1850 or earlier are present in isolated numbers. There is no evidence of tree planting after *c* 1900. Coppice management appears to have been largely abandoned by 1915 but the size, density and distribution of the hazel stools suggests that coppicing was an important consideration at least to 19th century woodland managers. Evidence of beech hedges can be seen on the boundaries of most individual woods in the area. These hedges have long grown out but were still being laid on the boundary banks of Lower Woods in 1888 as shown in a painting of the Beaufort Hunt (Badminton Estate).

Essentially then, Lower Wetmoor and Little Bath Riding, being parts of Lower Woods, represents a largely intact fragment of ancient woodland, actively managed on traditional lines for commercial exploitation for many centuries but largely abandoned around 1900. Traditional management practices, for the purposes of nature conservation, have been resumed over much of the area after 1970 (see Peniston 1972).

SURVEY AND EXCAVATION

THE EARTHWORKS

A number of features indicative of former woodland management were recognised in Wetmoor at the start of the project. Similar features are present throughout the whole of Lower Woods. These features are: boundary banks, trenches, sawpits, charcoal hearths, drains, rides and trackways. A brief background introduction to each type of earthwork is given.

BOUNDARY BANKS

In coppiced woodland, regenerating coppice is vulnerable to browsing by domestic animals and deer. This period of vulnerability lasts for six to eight years (Patrick & Hendry 1982) and arises every time the coppice cycle is repeated. Some considerable effort is required to exclude browsing animals from coppice woodland. Hedges do not grow well in shaded woods. Hurdles or other fences require repeated maintenance. Thus the medieval woodsman constructed elaborate banks and ditches to exclude cattle and, in some cases, deer (Rackham 1976). Within Lower Woods some 12 miles (18km) of banks are present surrounding each of the separate woodland holdings.

Surrounding Lower Wetmoor there are 2km of banking, up to 1.2m high and between 2.5 and 4.5m wide. The banks bounding Gibbons Trench, as with most trenches in Lower Woods, run in parallel pairs, the intervening 15-20m wide zone forming the trench proper (see below). The

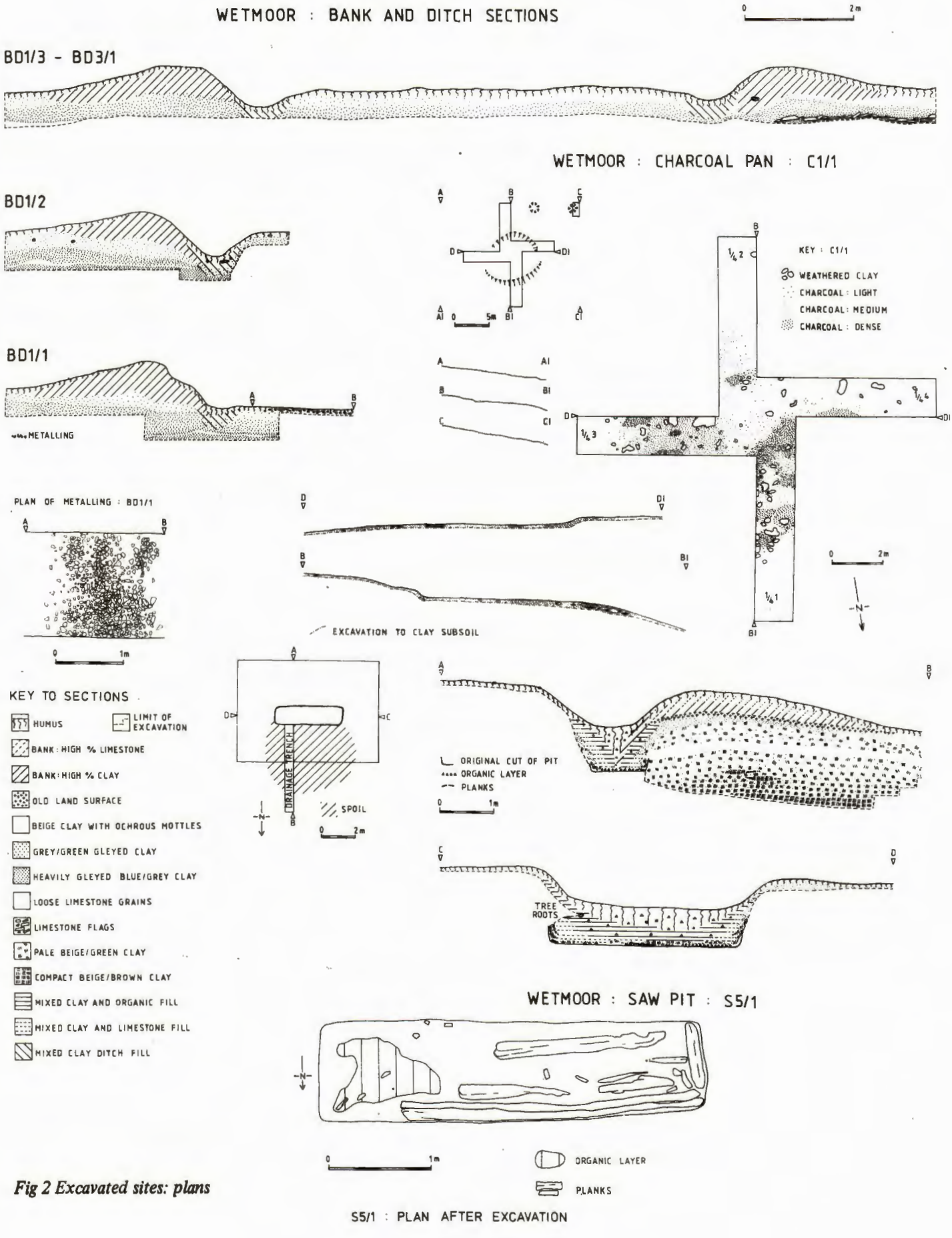

Fig 2 Excavated sites: plans

banks adjoining the trenches have a 0.5 to 1.0m wide ditch on the trench side of the bank, while those on the north, east and west edges of the meadow have ditches on the meadow side. Exceptionally, the bank at the south-east side of the meadow has no visible ditch, while at the north-east end of Lower Wetmoor there are some 200 to 300m of multiple banking forming concentric arcs.

Two 1.5m wide sections were cut through the eastern bank and ditch adjoining Gibbons Trench, with a third section cut across the entire trench including both flanking banks and ditches. In all cases the sections showed a smilar structure.

The sequence of soil horizons are shown in Fig 2, the banks being composed almost entirely of weathered clay apparently derived from the ditch and from the surface of the trench itself. The sections showed that bank material had slumped into the ditches, reducing the latter in size and occasionally obscuring the original line of the ditch. Deposit sequences within the ditches are absent beneath the superficial leaf litter horizon.

Beneath the banks the original land surface deduced by levelling was detectable only as a faint dark line within otherwise uniform beige clay. Leaching and other soil processes appear to have destroyed the original humic horizon. This is in contrast to the more recent and clearly visible land surface lying beneath the sawpit spoil (see below). In the absence of any artefacts, it appears that both bank and ditch, and probably the trench,were constructed simultaneously at a time considerably earlier than the sawpits.

The banks have suffered disturbance. The several breaches recorded are associated with the construction of the rides and undated trackways (see below). The tops of the banks, along Gibbons Trench particularly, bear scattered evidence of a long grown-out laid beech and thorn hedge. Elsewhere mature oak (*c* 120 year-old) is established on the rear slope of the bank. Bank profiles, recorded at 15m intervals show considerable variation in detail. However, taking into account the degree of disturbance, localised variation in soil structure and slope, the evidence suggests that the bank and ditch constructions follow a single pattern or style, apparently erected as a continuous and probably contemporary structure.

The general pattern exemplified by BD1/2 (Fig 2) is of bank rising steeply from a 0.5-0.7m deep ditch. The original height of the bank, from the bottom of the ditch, is unlikely to have exceeded 1.8m, rather lower than those described from East Anglia (Rackham 1976). The rear of the bank was well supported with a soil incline extending back some 4-5m.

The ditches appear to have been partially re-dug probably in quite recent years. Near BD1/2 on Gibbons Trench, the ditch has been widened into an irregular ovoid, shallow, water-filled depression. It may have served as a watering place for draught animals. The original line of ditch, however, clearly enhances the bank as a barrier. The ditches may have had a secondary function in draining the adjoining access roads (the trenches).

TRENCHES

Within Lower Woods there are wide roadways known locally as trenches, usually with a distinct name (e.g. Horton Great Trench, Pipers Trench). It is presumed that the original function of the trench was, as today, for access and timber extraction.

Within the survey area there are 1800m of trenches including Gibbons and part of Horton Great Trench. Trenches clearly differ from rides in their construction. They can be of considerable width, over 20m in places and are bounded on both sides by a ditch and bank, the ditch being on the trench side of the bank. Trenches also possess sequences of ridges and furrows running cross-ways at 5m to 20m intervals. These, however, are not continuous along the whole length of the trench but appear to be associated with areas of poorest drainage.

The trenches today are regularly used for access; trial excavations showed a structurally featureless soil. However, evidence was found of hardcore-like deposits scattered throughout Gibbons Trench. Systematic prodding revealed a discontinuous line of stones 0.5 to 1.2m wide, largely confined to one side (the NE side) of the trench. Isolated pothole-like circular deposits were occasionally found. 70-80% of the metalled sites were in areas of relatively poor drainage. Further concentrations occurred near gateways E3, E5, E6 and E7 (Fig 1). Similar stone deposits were recorded as isolated patches within the lines of multiple banking about E1. In all cases the metalling was of uniformly-shaped stones 30-100mm long, similar to those on the rides (see below) and available from the bed of the Little Avon river 300 to 500m away.

Exposure of the metalling at BD1/2 and BD1/3 confirmed that it lay at a depth of 50-150mm consisting of a single layer of stones, tightly packed in the centre of the strip, and producing a marked camber. The stones themselves were embedded in a structureless olive grey-ochrous mottled clay.

While it is clear that the trenches and banks and ditches are probably of similar, perhaps, medieval age, no date can be provided for the metalling. However the one-sided location, the width and depth are remarkably similar to the metalling of the more recent, probably 19th century rides (see below).

SAWPITS

The trunks of felled trees may be removed intact from woodland though often with difficulty. Alternatively, timber as planks can be cut on site, using sawpits dug close to the felled trees. By rolling prepared trunks over the sawpit, two men with a two-handled saw would cut the bole into planks, the under-sawyer working in the pit, the upper-sawyer standing on the trunk. The direction of the trunk during sawing was controlled by the use of blocks or wedges, spikes and ring-dogs. The pit itself was frequently wood-lined, shored and floored. Both the Liverpool and Beaufort papers record the regular production of boards and planks from the mid-18th century. The Beaufort papers record "digging a sawpit 2nd May 1702: paid Wm. Kenson three days at 10p per day." A 1731 entry in the Liverpool papers refers to the digging of a sawpit at a cost of 7/-. This more extensive structure may however have been stone-lined and could be the pit still existing near the Malting House of Hawkesbury Manor. It is about 2.7m long by 0.9m wide and much over-grown.

Eleven sawpits have been positively identified in various parts of Lower Wetmoor and Little Bath Riding. It is likely that others exist undetected. Visible as long oval depressions, of burial grave-like proportions, the pits are all within 40m

of access trenches or rides. Two pits were excavated (S4 and S5, Fig 1) and were revealed as rectangular, straight-sided, flat-bottomed pits, 3.5m long, 1.0m wide and 1.5m deep. (Fig 2). The original pit spoil was largely concentrated on the downslope side, giving a more or less level area immediately around the rim of the pit. During this excavation, to prevent constant waterlogging, drainage ditches were constructed at right angles to the long side of the pits.

Both sawpits showed similar soil deposit sequences, within the pit and on the adjoining spoil heap. The soil horizons of the spoil (loosely compacted limestone over pale beige clay, orange mottled clay, then humic brown clay) were the exact reverse of the local subsoil deposits. In neither pit was there any sign of redigging. The sawpit fill, consisting of limestone fragments beneath mixed clays, was not deposited in horizontal layers but at 45° to the vertical sides. The sawpit fills derived from natural weathering processes. This differs from the evidence of Rackham (1980) where sawpits from East Anglian woodlands were deliberately back-filled.

Sawn oak planks had been laid at the bottom of both pits to improve the undersawyer's foothold (Fig 2). There were however no indications that the pit sides had been lined or shored. A patchy layer of organic matter (fine sawdust, fragments of sawn wood, nutshells and decomposing leaf litter) at the bottom of S5 indicates that the sawdust produced during use of the pit was almost all removed prior to abandonment.

The sawpit spoil heaps revealed several artefacts. Traces of charcoal were present (at S5) within the lower-most humic clay layer, possibly the remains of a small fire. Three artefacts were recovered from the surface of S5 fill and weathered spoil. These were; sherds from an almost completely restorable, two-handled possett cup (Fig 3) of Bristol manufacture, with combed slip decoration and dating to *c* 1700-1770; fragments of the body and base of a bottle originally containing fortified wine dating to *c* 1700-1750; and a pair of metal calipers or dividers (Fig 4). These artefacts indicate that construction, use and infilling of saw pit S5 took place at some time prior to the later 1700's. Saw pit S4 produced two artefacts, both from within the spoil, a broken metal wedge (Fig 4) which had probably been used in securing the trunk to wooden beams over the pit; and the brass cap of an Ely shotgun cartridge dating to the early 1900's. The latter object might indicate that saw pits were still being constructed in Wetmoor this recently.

The overall impression, from both pits, is of structures used for a limited time, and in view of their ready waterlogging, operated in dry weather. To gauge the time taken to construct a sawpit, an identical-sized pit was dug during the survey, in similar soil, by two fit men in 12 working hours. To experienced woodsmen, the construction of a sawpit may have been one full day's work.

CHARCOAL HEARTH

Charcoal is carbon derived from the controlled charring of wood under a restricted air supply. Uncontrolled burning with complete oxidation results in wood ash. The skill of charcoal buring is largely concerned with preventing wood-ash formation. The process has been fully described by Armstrong (1980). Requirements for charcoal production would include an adequate supply of small wood, a relatively flat cleared area on which to construct the hearth, a supply of turfs or clay sods to cover the wood clamp, possibly a source of water to douse flames, and access for removal of bulky charcoal. These requirements are met at one site in Lower Wetmoor (Fig 1 - C1/1). No other charcoal hearths have been identified in the area and no reference to charcoal burning appears in the papers of the neighbouring estates. Local outlets for charcoal could have included the Bristol gunpowder works as well as Bristol glass makers.

The site is a levelled circular area 7m in diameter cut into an 8°-10° slope. The depth of the cut at the back is 0.5m. The hearth is sited some 40m from the nearest water supply (the river) and 20m from the open meadow. Four sections were excavated, at right angles, across the hearth (see Fig 2). Below the leaf litter, the 5-35cm deep humic clay layer contained considerable amounts of clearly visible powdered charcoal. The greater part of the charcoal dust formed a hard brittle 5-15mm thick layer at the base of the humic clay horizon. Charcoal fragments, up to gravel-sized

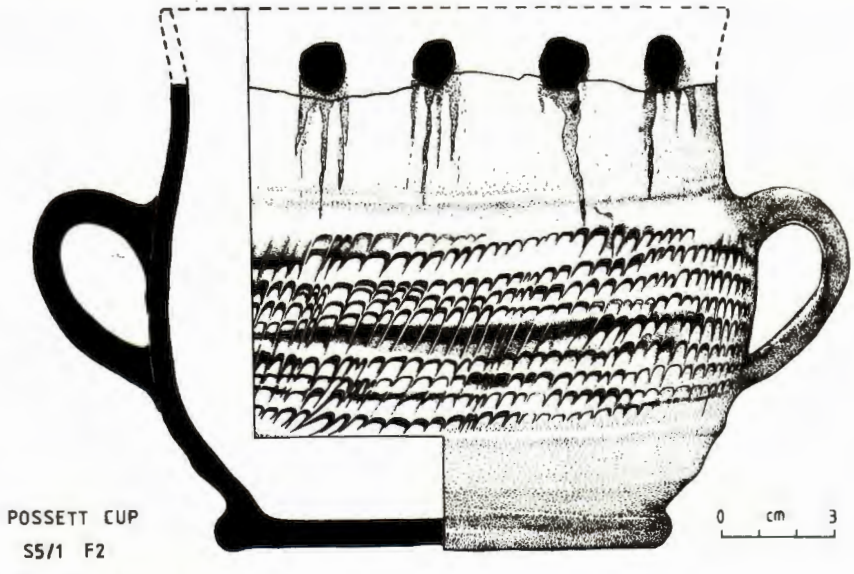

Fig 3 Reconstructed posset cup (1700-1770) from sawpit spoil

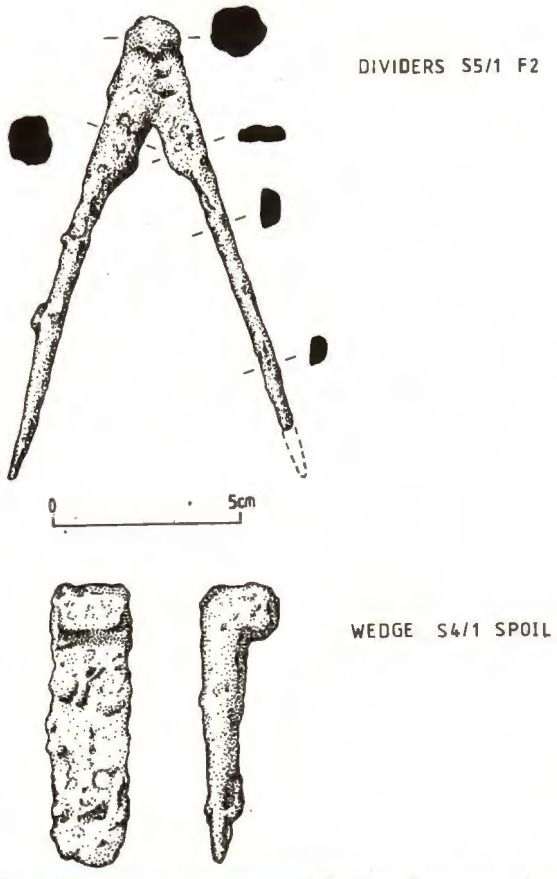

Fig 4 Drawings of metal wedge and dividers from sawpit spoil

pieces, were scattered within this horizon at various depths. The major concentration of charcoal was on the downslope run of the hearth along with raised, ireggular-shaped clumps of brown clay. This latter may be the remains of a turf skin covering the charcoal clamp.

Some 50 pieces of charcoal, of 1cm or more in length, were randomly selected for identification. Within this sample, the derivation was:

Oak *(Quercus spp)*	40%
Hazel *(Corylus avellana)*	15%
Ash *(Fraxinus excelsior)*	35%
Alder *(Alnus glutinosa)*	10%

All such species are present today within 50m of the hearth. Notably absent from the charcoal analysis were the nearby growing hawthorn (*Crataegus* spp.) and field maple *(Acer campestre).*

Soil analysis of the charcoal-impregnated humic layer gave pH values of 6.9-7.9 but with little or no carbonate reaction. The areas surrounding the hearth had a pH of 6.0-6.6. This limited sampling indicates that charcoal burning may raise the soil pH; certainly values exceeding 7.4 are unusual anywhere in the woods.

No other structural features were found within or around the hearth area. Two ceramic artefacts from the humic clay layer, an abraided unglazed body sherd and an unglazed bar handle with incised decoration are probably medieval in origin. The context is not sufficiently secure to allow them to date the hearth, particularly as they show no indications of having been through a charring process.

Other levelled circular features can be distinguished in Lower Wetmoor. Natural or man-made, examination failed to reveal any indication of charcoal as fragments or dust.

DRAINS

Drainage systems in plantations are usually formed during phases of replanting. Their purposes, at least in hardwood forests, are to provide suitable soil conditions for sapling planting and growth. Maintenance involving leaf and debris removal would normally have been practiced in the early years of regrowth. Numerous examples are present throughout the area. Other drainage systems may be associated with banks (see above).

In Lower Wetmoor 1.475km of drain were mapped over an area of 12.8ha. These shallow ditches were 0.25m deep and varied in width from 0.2m to 0.4m,with the excavated material piled along one or both sides. The drains form a comprehensive linked system, outflowing into the eastern-most gully (see map). Traces of other drains leading into local gullies were occasionally detected and may represent the remains of an older system.

A 2m wide section through one of these drains revealed a fill of weathered, featureless, dark grey/brown clay below a loosely compacted layer of decaying organic matter. Much of the originally excavated material had weathered into the drain, forming part of the clay fill. No form of dating evidence is available for the construction of the drainage system in Lower Wetmoor, though the Beaufort Estate records of 1840 include an entry for drain maintenance in the neighbouring woods. A mid-1800's moulded unglazed earthenware pipe is incorporated into one of the main drains where it crosses the ride, giving an antequem date for the construction of the drains and thus possibly for the whole system. In addition many of the drains coincide with the lines of linear plantings of 80-100 year-old oak standards.

RIDES AND TRACKWAYS

Rides, that is linear clearances, are present in many long-established plantations. Their original construction may have been associated with boundaries between woods (as in the Beaufort Estate north of the survey area) or for sporting purposes, particularly hunting. Such rides may have also served for access during periods of timber extraction. Trackways, in this context, differ in not being strictly linear but more often following natural contours, in not being through-routes but petering out inside a wooded area. Their original function may have been to provide temporary access to one limited site.

There are 1.2km of rides running through the 15.4 ha woods along with short traces of overgrown trackways (Fig 1). The rides vary between 4m and 8m in width and do not possess a bank. Where land-drains cross the rides there are short stretches of ditches carrying water from the ride into the drain. The main ride running north-south through Lower Wetmoor is a uniform 4.5m width along its length with discontinuous 1m-wide strips of metalling on the west side. These metalled strips, 10 to 30cm below the surface, run for 2 to 5m at right angles to the irregularly-spaced furrows crossing the ride. The metalling consists of rounded stones 50-220mm in length resembling the derived stone deposits of the nearby river banks. The rides provide access through

the wood and join up with the trenches that form the boundaries of Lower Wetmoor. No evidence was found of ride maintenance or repair. The presence of 120 year-old trees parallel to the ride suggests a construction date of 1860 or earlier.

The trackways, unlike the rides, are much overgrown with mature oak growing close to the track span. Visible as two or three parallel channels or ruts 2.0 to 3.5m wide, the trackways show no evidence of metalling or drainage. A 70m long trackway at the southern end of Lower Wetmoor leads from a breach in the boundary bank. Signs of spoil close to the gap suggests that the bank was opened some time after construction. A second 50m-long trackway from F1 (Fig 1) curves eastwards following the slope of the land, terminating in an area above the river showing disturbance in the form of broken slopes and ledges. The form and origin of this area is not understood.

CONCLUSIONS

The woodlands described, Lower Wetmoor and Little Bath Riding, are of considerable age, preceding the Norman Conquest. The evidence suggests that until *c* 1890-1900 the woods were actively worked for coppice as well as for a variety of timber products, the area being managed on traditional lines.

Over the centuries a series of extensive man-made structures have been imposed on the woodlands, all clearly related to traditional management practices. These are:

1. Boundary banks and ditches, designed to keep out cattle and other animals and to define ownership. Probably of medieval origin, constructed perhaps after the date of disafforestation *c* 1230.
2. Trenches or major permanent access routes are associated with the boundary banks and probably of similar medieval context but with a more recent (perhaps 19th century) addition of a narrow strip of metalling along one side.
3. Sawpits were constructed to provide sawn planks from *c* 1700-1900 and possibly earlier.
4. Charcoal hearth for the controlled production of charcoal; the sole site could not be dated but may be associated with the Bristol gunpowder works of the late 18th and 19th centuries. The mixed nature of the wood used suggests the charcoal formed may not have been of the highest quality.
5. Trackways, often ill-defined and overgrown, are later than the boundary banks but probably earlier than the 19th century rides and provide local access to the centre of the woods.
6. Rides, probably pre-dating the 1860-1870 tree planting, are not as elaborate as the trenches and may have served mainly as through routes for fox-hunting.
7. Drains, imposed as an integrated network over much of Lower Wetmoor and probably linked to the major replanting of *c* 1860-1870.

In these two small woodlands of 15.4ha, there are over 6.5km of banks, trenches, rides and drains. Together with sawpits, hearths, unexplained depressions, multiple banking and overgrown tracks, these structures indicate clearly the extensive disturbance and elaborate management techniques practised in ancient woodlands. In all cases most of the structures can be directly linked to forestry practices known to have been prevalent in the area until the start of the 20th century. The rides and trenches are occasionally used today; the other features have been long abandoned but clearly reflect the highly organised working lives and diverse skills of the medieval forester and his successors. The notion of the solitary woodsman with axe over shoulder should be replaced by a small group of skilled men more likely to have had picks, spades, barrows for stones and six-foot saws. Far from being solitary, contact with outsiders would have included itinerant coppice workers, hurdle makers and charcoal burners. A busy life.

ACKNOWLEDGEMENTS

The Wetmoor Project was undertaken by Avon County Community Environment Scheme at the request of the Gloucestershire Trust for Nature Conservation. ACCES is an MSC scheme sponsored by Avon County Planning Department. The team was: Nicola Bannister (Supervisor), Judith Toms, Judith Hickman, Gary Paul, Mike Ware and Julian Wyth. The permission of His Grace the late Duke of Beaufort and of Sir George White to examine their respective family papers is gratefully recorded. Dating of ceramic, glass and other artefacts was provided by David Dawson and R. Harrison, and charcoal identified by Des Cousins. The advice of Rob Iles was of great help. GAFH acknowledges the generous support of the Leverhulme Trust.

REFERENCES

Armstrong, A. (1978) *Woodcolliers and charcoal burners.* Coach Publishing, Horsham, Sussex.

Gloucestershire Record Office:
Badminton Estate Documents
(a) Timber Accounts 1786-1850 D2700. Acc 3702
(b) Weekly Expenditure and Estates 1756-57 G.
(c) Hawkesbury and Inglestone Woods. Map 1810. 38e.
Brooke, G. E. (1981) Brooke of Horton on the Cotswolds.
R.O.L. C1. Tithe Maps of Horton and Hawkesbury.

Hendry, G.A.F. (1980) *Wetmoor Nature Reserve.* Gloucestershire Trust for Nature Conservation, Standish, Glos.

Jenns, O.C. (1968) The vegetational history of Ashdown Forest. *Q.J.For.*, 62, 46-52.

Moore, J.M. (1982) The medieval forest of Kingswood. *Avon Past*, 7, 6-15.

Patrick, C. & Hendry, G.A.F. (1982) The impact of coppicing on a woodland environment. *Proc.Bris.Nat.Soc.*, 42, 23-32.

Peniston, M. (1972) Wetmoor Nature Reserve, in Dennis E. (ed.). *Everymans Nature Reserve.* David & Charles, Newton Abbott.

Rackham, O. (1976) *Trees and Woodlands in the British Landscape.* Dent, London.

Rackham, O. (1980) *Ancient Woodland.* Arnold, London.

Tittensor, R.M. (1978) A History of the Mens: a Sussex woodland Common. *Sussex Arch. Coll.*, 116, 347-74

AVON ARCHAEOLOGY 1983

Rob Iles

The only large excavations in Avon in 1983 took place in Bristol. The City Museum's Field Unit carried out two excavations in Redcliffe, an area they have concentrated most of their effort in recent years (see Fig 5), and the Museum also started an excavation on the site of St Augustine the Less. A start was also made on the excavation of a glasscone at Nailsea by Avon County Community and Environment Scheme (ACCES), funded by the Manpower Services Commission and sponsored by Avon County Planning Department. At the time of writing (mid 1984) preliminary discussions are taking place about the closure of the Western Archaeological Trust (formerly CRAAGS). The trust has built up a fine record for its work in this area although most of it has been in neighbouring counties. It's dissappearance from the local scene does not bode well for important local sites under threat except for Bristol and Bath where there are still archaeological units.

A BAARG parish survey for Tytherington was completed by A Baddeley; It should be published soon in a new format with a large number of maps. The second and final year of the intensive field survey of Marshfield was completed under the direction of V Russett of ACCES. A small ACCES team also initiated an Historic Gardens survey of Avon and this will be used to assist a national register being compiled by the new Historic Buildings and Monuments Commission. A number of other surveys were undertaken with a specific conservation objective. A survey of Widcombe estate, West Harptree, was undertaken by ACCES as a follow-up to the work done on another Duchy of Cornwall estate, Englishcombe, the previous year. The County Planning Department also started preliminary work on two other historic landscape surveys; one was for a Duchy of Cornwall Demonstration Farm project at Poplar Farm, Stanton Prior; the other was for the Bleadon estate, owned by the Church Commissioners, and carried out in association with the Avon Farming and Wildlife Group.

The format of the following list of 1983 discoveries is as before with entries by parish grouped under general period headings. In editing this list a great deal of important material has had to be left out for reasons of space, but it is held with the Sites and Monuments Record in the County Planning Department, where it can be consulted. The computerisation of the Sites and Monuments Record is continuing under the direction of B Ware. Finally I would like to record my thanks to all recent contributors to the Sites and Monuments Record.

PREHISTORIC

MARSHFIELD Ironmongers, ST798760
See report under Roman section.

NEWTON ST LOE, ST68906353
A pipeline crossed the field system marked on OS maps. There were no finds. Limestone rock lies just below the turf here, and is particularly close to the surface under the "banks" of the field system. (R Iles)

PRIDDY, Priddy Plateau project
Fig 1 shows what should have been Fig 10 in the article by Joan Taylor and Rebecca Smart (An investigation of Surface Concentrations: Priddy 1977) in *BAA* 2, 2-11. The reduction of flints, drawn by R Smart was to about half of their original size.

The acknowledgements were not given in the published article but grateful thanks are due to all bodies who have contributed to this research, although they were supporting the larger excavation of the mesolthic burnt structure. The Crowther-Beynon fund of Cambridge University donated money to excavate Neolithic/Beaker scatters at the east end of Yard Park field; other contributions came from the Maltwood Fund, the Society of Antiquaries, the Department of the Environment through CRAAGS and Bristol City Museum. Equipment and money came from Liverpool University, and Mr H Dyke and Mrs A Loveder provided food and shelter for the team. The following individuals also gave assistance; E Boore, and C Shell for their excavation assistance; Dr I Smith, Dr P Woodman and Prof F Oldfield for consultation; and Dr G Newell and D Oates of the Geology Department, University of Liverpool, for their assistance in the pottery study.

TORMARTON, Haycroft, ST781792
Over 50 pieces of flint recovered by field walking in a small area is unusually high for the district. Tools included flakes, scrapers, a barbed and tanged arrowhead and a possible mesolithic flint core. (G Stock)

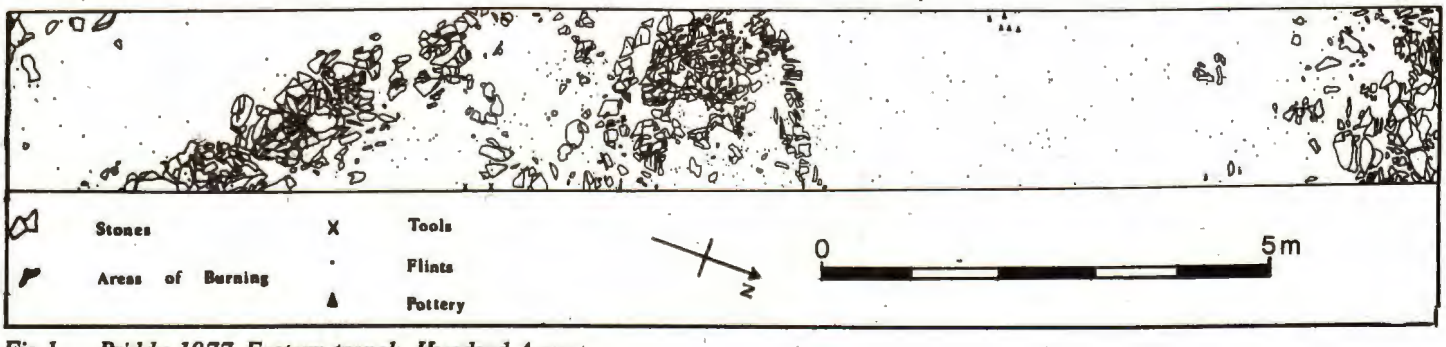

Fig 1 Priddy 1977. Eastern trench, Hundred Acres

BLEADON
Early fields

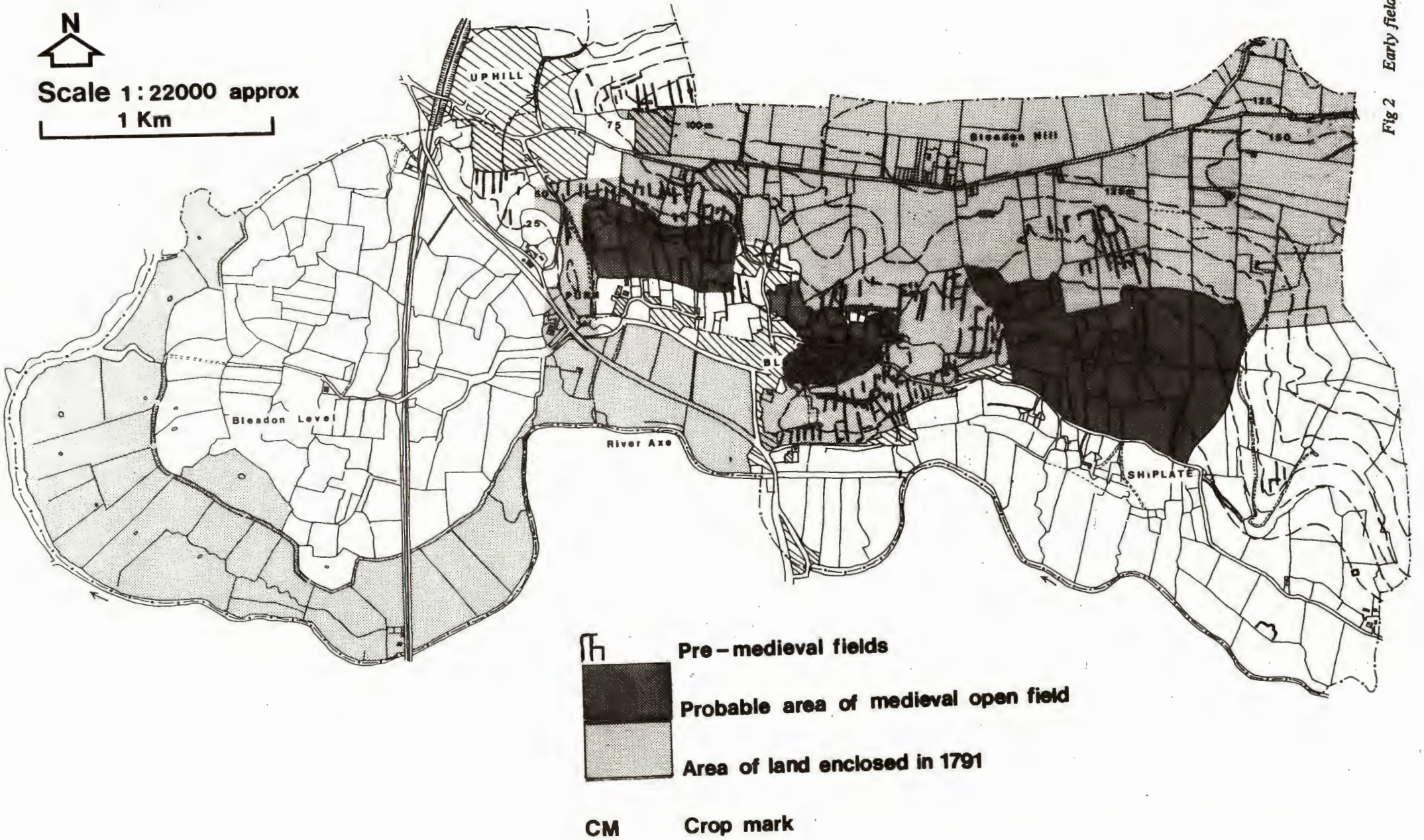

Fig 2 Early fields, Bleadon

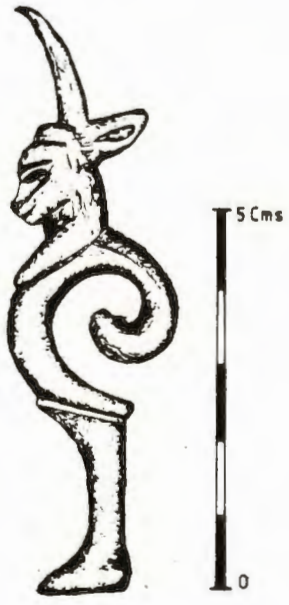

Fig 3 Bronze figure, Filwood Park, Bristol

ROMAN

BATH, Royal Baths, ST749646
In advance of a redevelopment scheme for the Royal Baths several trial trenches were dug into the cellars by an MSC team for Bath Archaeological Trust. The cellars were dug into natural clay so little was found apart from a Roman wall, with three late Roman coins. (J L Lawes)

BLEADON
Archaeologically the main result of a new survey of this parish (see Introduction) was to record early fields from vertical air photos (Avon County Council series 1975). These fields survive as earthworks in four main groups (Fig 2); the first is between Purn and Bleadon village, above West Town field; on South Hill, called Littleton Hill by Skinner (p 00), south of Bleadon; Hellenge Hill, to the north and north east of Bleadon; and the fourth, above Shiplate open field. All of these places have fairly steep slopes and if used at all only for rough grazing, which is presumably the reason for their survival. There are references to even more extensive remains of early fields on Bleadon Hill a small area survives just east of Uphill, but most visible remains here have been lost by ploughing in the last 50 years.

These fields are typically long and thin, a layout usually thought to be Roman. The length of the fields is probably about 150-175m and the width generally of the order of about 35m or 70-80m. No measured surveys were undertaken for this short project but they would be very valuable in understanding the morphology of this important group of field remains. In particular it would be interesting to know if they were sub-divided (and so account for the two widths) and their relationship to other remains. For instance there are ridge and furrow fitted within the earlier fields and a later trackway going across the fields on South Hill.

Roman finds are common in the parish but the only definite occupation site is in the centre of a former open field (marked CM on Fig 2). Air photos show cropmarks in that area including a possible trackway leading towards a track within the field system to the north. Roman finds have been recorded from there but nothing was found in fieldwalking after ploughing in 1983.

Two interesting facts emerged from plotting the early fields. First their orientation, mainly north/south or north-north-west/south-south-east, is consistent all the way along the hillside and is the same on other early field systems on western Mendip (eg Elborough Hill, Hutton; Christon Hill; and Dolebury Warren). Secondly, the layout and orientation seem to have affected the medieval open field system. The probable area of open fields as shown on Fig 2 is only approximate; it relates to the area of 'old enclosures' shown on a 1791 enclosure map. Bleadon itself is known to have had two open fields, West Town Field and East Field, the latter now mainly built up. On the slopes above West Town Field and, to a lesser extent, above Shiplate open field the boundaries of the early fields appear to run into the medieval strip fields, which themselves have been fossilised by later enclosure. It will probably remain an unanswerable question as to whether this was due to continuity of farming practices or simply because the sheer size of the early boundaries precluded any later modifications in their general layout. (R Iles and M Stacey)

BRISTOL, Horfield, ST59707708
Following the discovery of five Roman coins by D Brimson on his allotment a small excavation by BAARG members uncovered three more coins and 60 sherds of Roman pottery - probably the result of manuring the area in Roman times.

BRISTOL, Filwood Park, ST591692
A bronze object (Fig 3) was found by S Wadman on the now destroyed Romano-British site (*BAA* 2, 12-20). It is a slim stylistic bust of an animal, possibly a hind, with an open scroll back and a single leg. The pointed horn and the flat upper face of the ear forms a platform which if used with others may have supported a small cauldron or brazing bowl. No direct parallel has been found but it must be functional, similar to several 'lion foot' supports found in the Rhineland. (RGJ Williams).

CHURCHILL, Dolebury Camp, ST45145896
B Cays found three Roman bronze coins (AD 253-375) on a re-routed path. (RGJ Williams).

COMBE HAY, ST73086102
A Roman stone coffin with bone fragments was found on a pipeline route (S Bird). About a dozen Roman sherds were found at about ST733608 on the same pipeline (R Iles).

CORSTON, ST68756385-68786380
A large quantity of Roman pottery was located on a pipeline in the same area as similar finds about 15 years ago. Several stoney areas were apparent including some possible cobbling (R Iles).

ENGLISHCOMBE, ST71626174
Part of a Bath stone coffin and about two dozen Roman sherds were discovered on a pipline route. (R Iles).

HUTTON, Oldmixon, ST339587
A final excavation on the Woodside estate by H Coward at the rear of 38 Woodside Avenue revealed paved stones, Roman pottery, and animal bone.

MARSHFIELD, Ironmongers, ST798760
Preliminary excavation of a circular stone building RI (A on Fig 3 in *BAA* 2, 50-51) by K Blockley for ACCES uncovered two perinatal skeletons and animal skulls in pits and several hearths. Taken with other features from the 1982 excavation this building may have had a religious purpose between the second half of the 1st century

and the mid-3rd century. Adjacent to it were a series of pathways with numerous finds including two bronze brooches and a complete steel-yard. Below R1 was another circular structure of pre-Roman date.

NEWTON ST LOE, Park Farm, ST696633
Two pieces of carved Bath stone have been recorded at Park Farm. One is built into the north wall of the main barn and is 76 x 22.5cm with two sections of stopped fluting. About 20m south of that barn a Corinthian capital, 36.5x42x34.5cm, was discovered in digging the foundations for another barn. The capital has a round hole, about 4cm in diameter, bored through the centre from the top to the bottom. Both pieces are badly weathered Professor B Cunliffe is of the opinion that they are most likely to be Roman. There does not appear to be any companion pieces in Bath, so there is a possibility of a major Roman building on the site. (Dom P Jebb).

OLDBURY-ON-SEVERN, Sheppardine, ST61429631
A new Severn embankment was constructed in 1983 between the Windbound and Severn House Farm, and the old sea bank was removed by Severn Trent Water. This work was watched by V Hallett who located a large amount of Roman material under the old sea bank just north of the Windbound at about 7m above OD.

PORTISHEAD, St Mary's Road, ST467755
A small trial excavation took place adjacent to Gordano School, where several Roman buildings were excavated before the school was built. A probable late Roman wall was located along with large quantities of slag. (A Morgan)

WELLOW, ST74535998-74555994
A fairly large concentration of Roman and medieval pottery with much stone and charcoal was found along a pipeline route. There were further pottery finds in the fields to the north (medieval) and to the south (mainly Roman).
(R. Iles)

EARLY MEDIEVAL

BANWELL, Banwell Church, ST39945913
During alterations to the south porch J Hunt noticed a fragment of Anglo-Saxon sculpture under a door jamb. It consists of a worn oolitic limestone slab and has an interlace design surrounded by a line of cable moulding. It has been drawn and recorded by Sally Foster for a BA dissertation (London Univ) on the Anglo-Saxon sculpture in Historic Somerset (also includes medieval Bristol).

MARKSBURY, Wansdyke, ST68826361
A pipeline route was deliberately planned to bypass the Wansdyke where it crossed the Corston Brook. However, as luck would have it the probable ditch of Wansdyke was cut through immediately to the west side of the stream, implying the latter has changed course. The ditch was about 3m wide at the base and was filled with stone especially at the southern (bank) side where there was also much charcoal.
(R Iles)

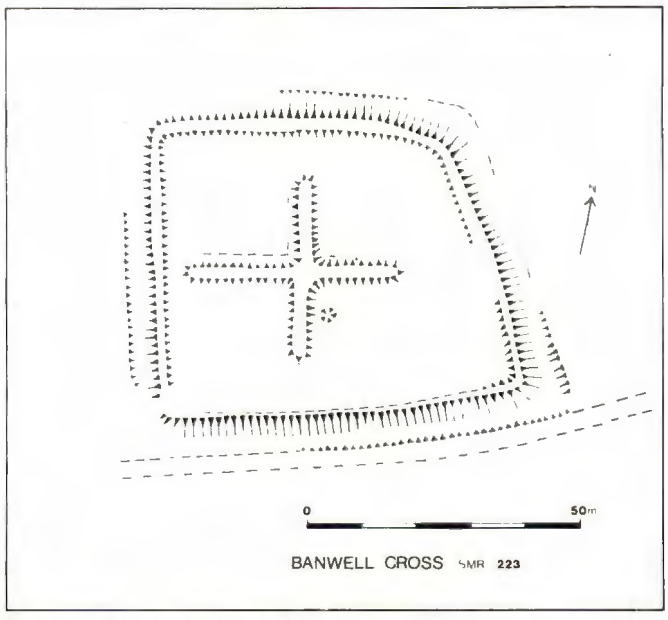

Fig 4 'Banwell Cross', Banwell

MEDIEVAL AND LATER

BANWELL, 'Banwell Cross', ST40305876
Following clearance of scrub and small trees from this unusual earthwork in Banwell Wood by K Rogers it was surveyed by her, B Ware, R Iles and E Dennison (Fig 4). The 'cross' is within a square enclosure which has a trackway on its southern side. The cross-shaped mound is 0.5-1m high with faint traces of a ditch on the northern side-the only part on flat ground. The mound is almost certainly an elaborate pillowmound; side ditches are quite common with pillowmounds, presumably to improve the drainage as rabbits do not like damp ground. The enclosure is unusual, although they are sometimes recorded in documents. This small rabbit warren was probably situated in Banwell deer park.

BRISTOL, St. Anne's, Brislington, ST62097208
A watching brief was carried out by John Bryant for City of Bristol Museum and Art Gallery on the site of the medieval pilgrimage chapel of St Anne during the removal of a modern factory. One small portion of wall was the only discovery. No trace was seen of the famous Delftware pottery, known to have existed on the site.

BRISTOL, Dundas Wharf, ST58997272
Excavation was carried out by G L Good for the City of Bristol Museum and Art Gallery, between April 1982 and December 1983, at Dundas Wharf on the Floating Harbour, to investigate the development of the waterfront of Redcliffe (Fig 5). It was shown that there was a gradual reclamation of land, as individual tenement owners extended their properties by building massive walls out into the River Avon, dumping rubbish behind them to make up the ground level. This occurred mainly during the 14th and 15th centuries, and by the 16th century the waterfront was close to its present position. In addition, it was possible to excavate one tenement almost to the street frontage, through a succession of floor levels from the 13th century onwards (Fig 6). The finding of a series of large ovens complemented the documentary evidence to suggest the presence of a bakery there from the 14th to 16th centuries.

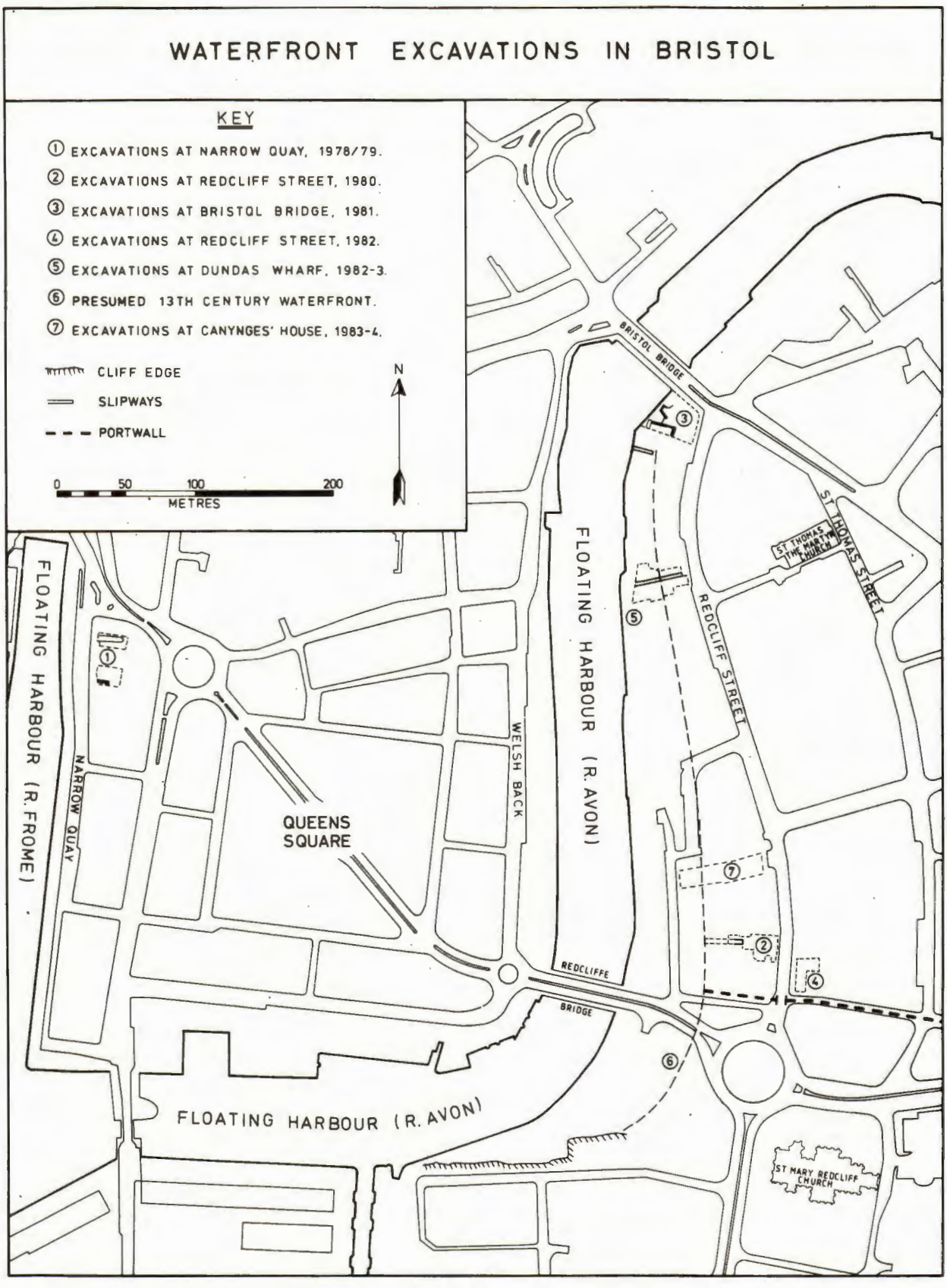

Fig 5 Waterfront excavations, 1978-1984, Bristol

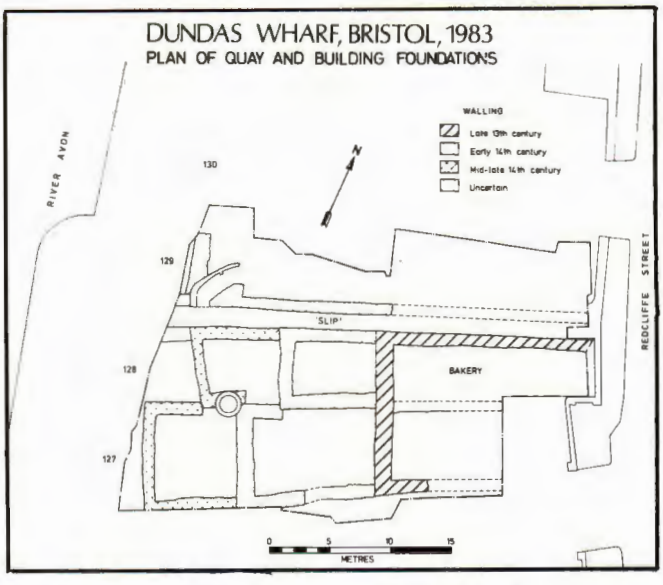

Fig 6 Dundas Wharf excavation 1983, Bristol

Evidence of timber structures pre-dating the laying out of the tenements was also uncovered.

BRISTOL, 95-97 Redcliffe St, ST59067256
Excavations were begun by R Jones for Bristol City Museum in September 1983 (Fig 5). This is believed to be the site of Canynges' House; the tenement was over 60m long although the front was destroyed in a 1930's road scheme. A 15th century tile pavement was removed from this site in the 1930's.

BRISTOL, St Augustine the Less, ST58497272
E J Boore began excavation of the church in advance of re-development. The church was blitzed in 1940 and demolished in 1962. The churchyard was cleared of its graves in 1971. By the late 15th century the church consisted of a nave divided from north and south aisles by arcades of five arches. The west tower contained an octagonal stair turret. The main porch stood on the north side with the vestry, rood stair and a second doorway on the south. The chancel and aisles were extended in 1708. From the late 17th century to the early 19th century virtually the whole interior of the church, below floor level, was used for brick-lined graves and burial vaults. Excavation is continuing.

BRISTOL, ST Nicholas Church Museum ST58937293
The first phase of work to stabilise one end of the Lower Church or Crowde, involved the driving of a horizontal investigative shaft beyond the west wall and two post-medieval burial vaults were discovered in addition to a number of single burials, some of which included traces of wooden coffins. A portion of the early medieval Town Wall was uncovered on the line of the main arcade and traces of later flights of stairs which originally connected the lower and upper portions of the church. A matrix of a late 15th/16th century brass was discovered on the south wall during stripping of 19th century plaster. (J Bryant and D Dawson)

BRISTOL, Portwall, TempleWay, ST59577257
One round tower and a 70m length of the Portwall was excavated at Temple Meads by John Bryant for the City of Bristol Museum and Art Gallery. The Portwall was probably under construction by about 1230. Parts of the wall were standing until the 18th or early 19th century. It was possible to investigate the relationship between the wall and its accompanying ditch and to show that the tower preceded the building of the wall proper. The wall began to subside into the ditch probably not long after construction and certainly prior to redevelopment in the 18th century. The site has produced large quantities of waste products from the nearby potteries at Temple Back including Delftware and combed yellow slipwares and also waste from the nearby tobacco-pipe factory of Frank Ring.

CLEEVE, Bickley, ST451650
After pottery sherds of medieval date were found in 1981 during the digging of clay-pits for an experimental kiln, a training excavation was carried out in 1982 to investigate the nature of the site, which appears to be an assart into King's Wood, by the City of Bristol Museum and Art Gallery under the direction of M W Ponsford. In 1983 an extension was opened up to follow up what appeared in 1982 to be the wall of a building. The first area opened contained small quarries to extract the local Carboniferous Limestone and an infilled swallet or large natural hole. The quarries produced medieval finds including an iron wedge and a pruning hook. Adjacent to the swallet, a rough dry wall met another at right angles and defined an area of shallow trenches evidently intended to enhance the depth of soil and opportunities for cultivation. The second wall cut the ends of those trenches and itself marked a terrace which it was revetting. Against both walls and over the lower terrace there was an abundance of finds, particularly 12th-13th century pottery, suggesting that midden deposits were accumulated for later spreading over the cultivated area. Although no traces of buildings have so far been found, the site has considerable potential for the illustration of agricultural practices and it is proposed to use these opportunities to pursue this objective as well as hopefully finding the living quarters.

CORSTON, ST687650
Earthworks and low stone walls on the south side of the A368 are probable sites of roadside cottages. (R. Iles)

DOYNTON, ST71757427
Earthworks of a probable mill leet and platform are being infilled. The earthworks of two deserted farmsteads reported in *BAA* 2, 53 are at ST71877388 and not ST71757425 as stated. (R Iles)

DUNDRY 'Crownhill", ST563656
Several early fields and enclosures on the south side of Dundry Hill have been recorded by R G J Williams. The layout of the fields and the situation of these sites at about 600' on the southern slopes of Dundry Hill is similar to that of the deserted settlement at Pickwick Farm (*BAA* 1, 55-6). The early field system has been sketch surveyed (Fig 7). The earliest documentary record found is in 1247 when a Robert de Crownhill was amongst local landowners named in a dispute (*Somerset Rec Soc* XL, 264). Several fields are named 'Cranhill' on Dundry Tythe map of 1842. Measured surveys were made of the following associated sites:
1 Deserted fam, ST56246556 (Fig 8)
There are a number of platforms and paddocks on the slope below a natural scarp with a spring nearby. Two rough stone gateposts 1m high survive to the south of the site of a building

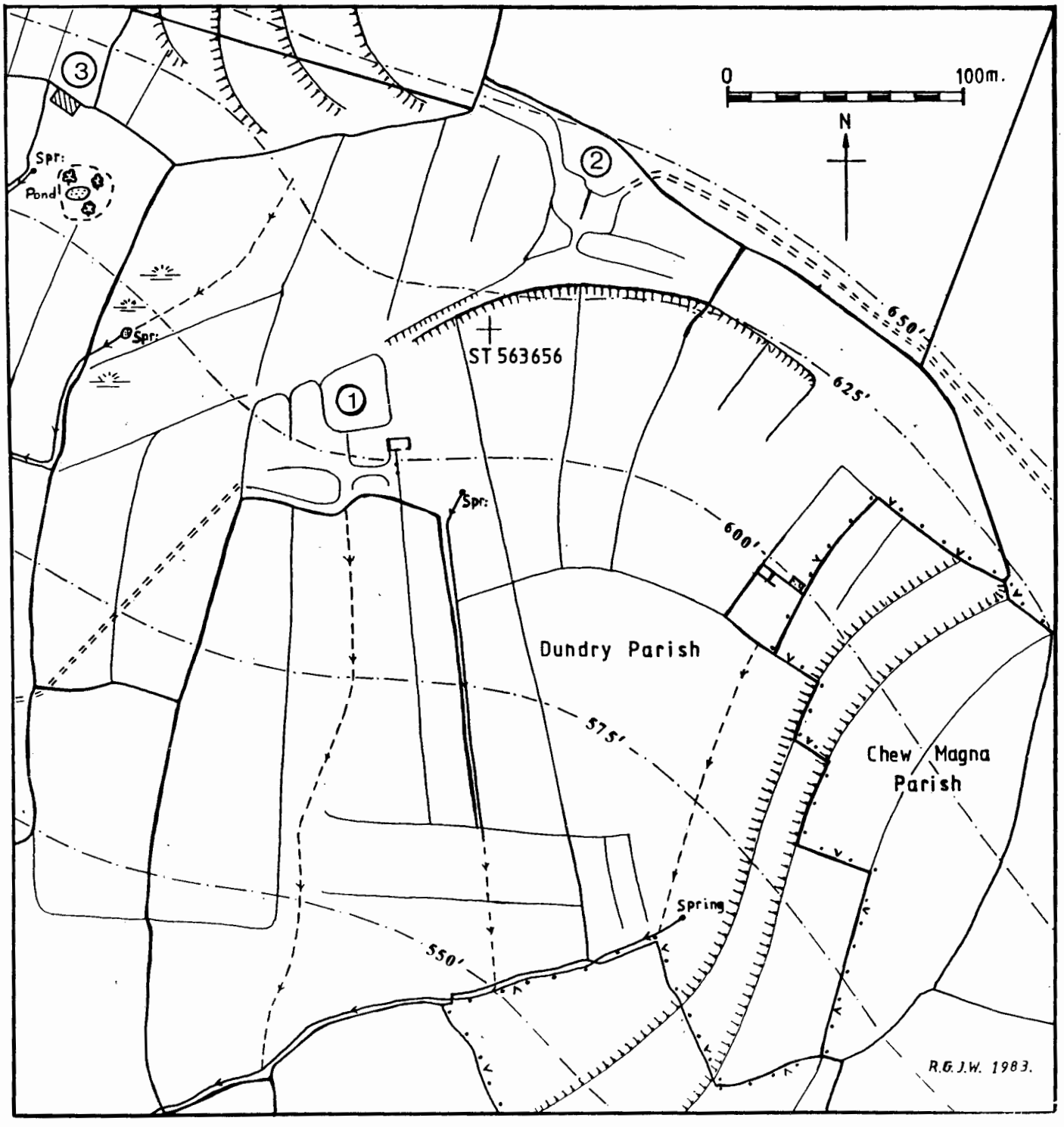

Fig 7 *'Crownhill' field system, Dundry*

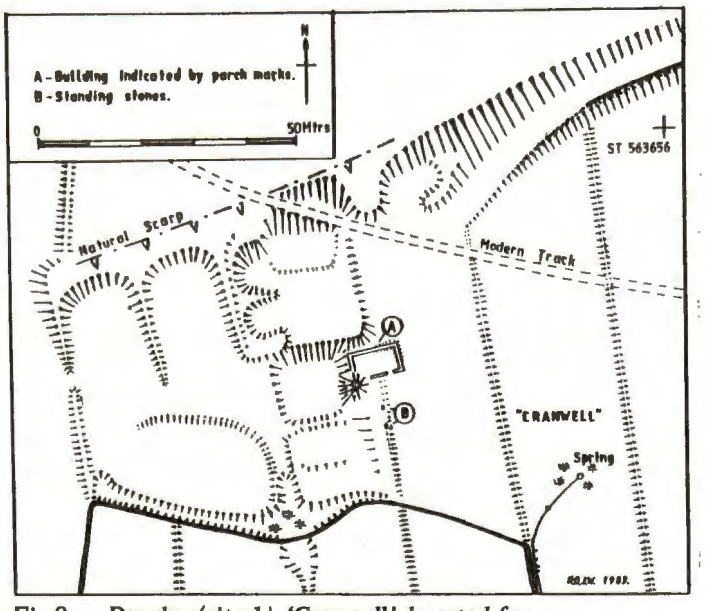

Fig 8 Dundry (site 1), 'Cranwell' deserted farm

7 x 17m indicated by parch marks during the dry summer of 1983. This may have been the farm at 'Cranwell' bequeathed in a will of 1581 to an Arthur Payton whose family owned land in this area from the 15th to the 19th century (Wood, F A, 1900, *Collections for a Parochial History of Chew Magna*, 59).

2 Enclosures, ST56346564 (Fig 9)

A holloway gives access to adjoining level enclosures cut into the upper slopes and two tracks continue to the hill plateau. These features may have been formed by surface quarrying but the field name 'Sheppys' (Dundry Tythe map, 1842) suggests they were sheepfolds.

3 Possible deserted farm, ST56116572 (Fig 10)

Slight earthworks and a holloway near a spring and well which issues into 'Chartle Well Brook' named on an Estate Map of 1736 (Somerset Record Office, T/PH/brc,6). The field system but none of the other features are shown on this map suggesting abandonment of the settlement by this date.

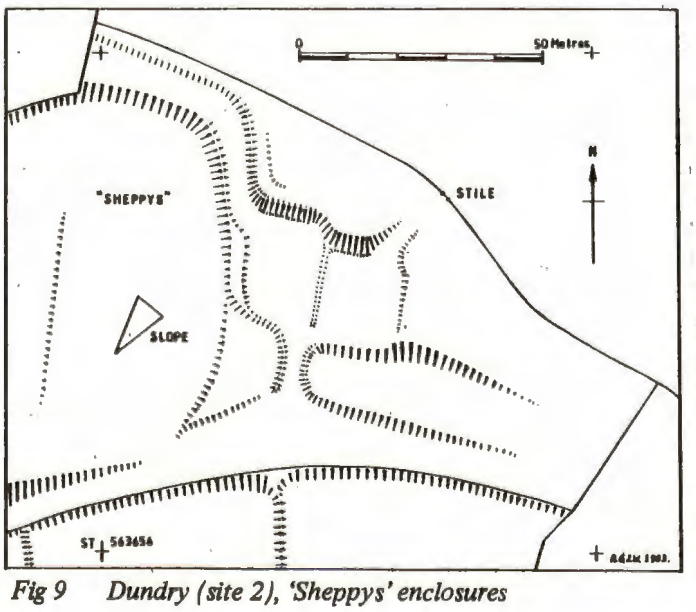

Fig 9 Dundry (site 2), 'Sheppys' enclosures

EAST HARPTREE, Richmont Castle, ST56155580

The earthwork remains of this Norman castle were surveyed by J R Russell, R G J Williams and J Hunt. The castle is dramatically situated on a wooded triangular spur between two steep-sided valleys. The castle was probably constructed in the late 11th century by Azelin de Perceval, who held the manor of East Harptree in 1085. It was certainly in existence by 1138, when it was captured by King Stephen from Sir William de Harptree, who was defending it on behalf of the Empress Matilda. The castle remained a residence of the de Harptree family (later known as de Gourney) for much of the medieval period. In the early 16th century, however, it was completely demolished by Sir John Newton, who used the materials to build a new house at Eastwood, 2km to the east. Leland, writing around 1540, describes the castle as "defacid to the hard ground". This very thorough robbing, coupled with later disturbance by lead-mining, makes interpretation of the surviving remains somewhat difficult. It is however, generally possible to distinguish the 16th century robber-trenches from the later mining "grooves" by their relative shallowness and regularity.

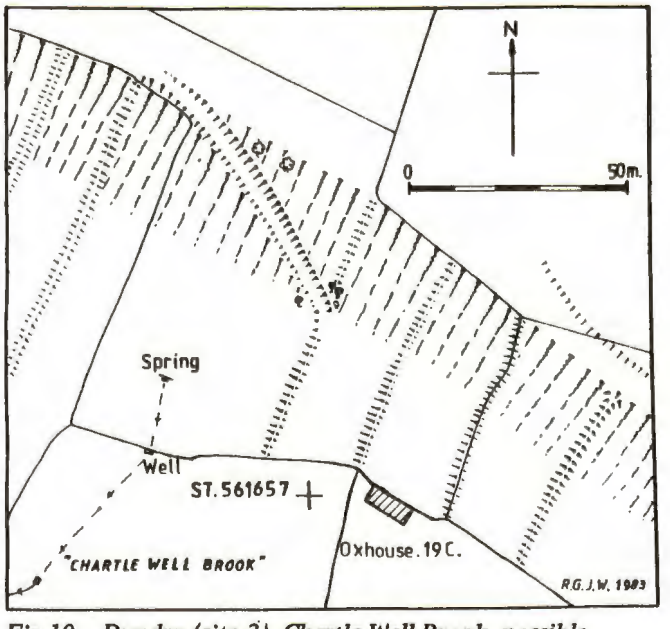

Fig 10 Dundry (site 3), Chartle Well Brook, possible deserted farm

The only substantial fragment of masonry surviving at Richmont is a curved section of wall, nearly 3m thick and batteres battered externally, on the western edge of the spur (Fig 11, A). This appears to be the north west quadrant of a circular or semi-circular tower, and can probably be identified with the 'dungeon' or keep mentioned by Leland, Collinson and other writers. Extending north from this fragment is a further stretch of wall (Fig 11, B) of which only the core survives; the robber-trench for the facing stones is clearly discernible. Further south two curving trenches (Fig 11, C, D) seem to represent robbed-out sections of the wall of an oval inner bailey, while a complex of mounds and hollows (Fig 11, E) may mark the site of another tower. The bank and ditch enclosing the outer bailey (Fig 11, F) is still well-defined despite extensive damage by mining, and seems originally to have run continuously across the spur. At the eastern end of the bank a further robber-trench (Fig 11, G) runs northwards to a point where a track, still in use but not shown on the OS map, enters the site from the south

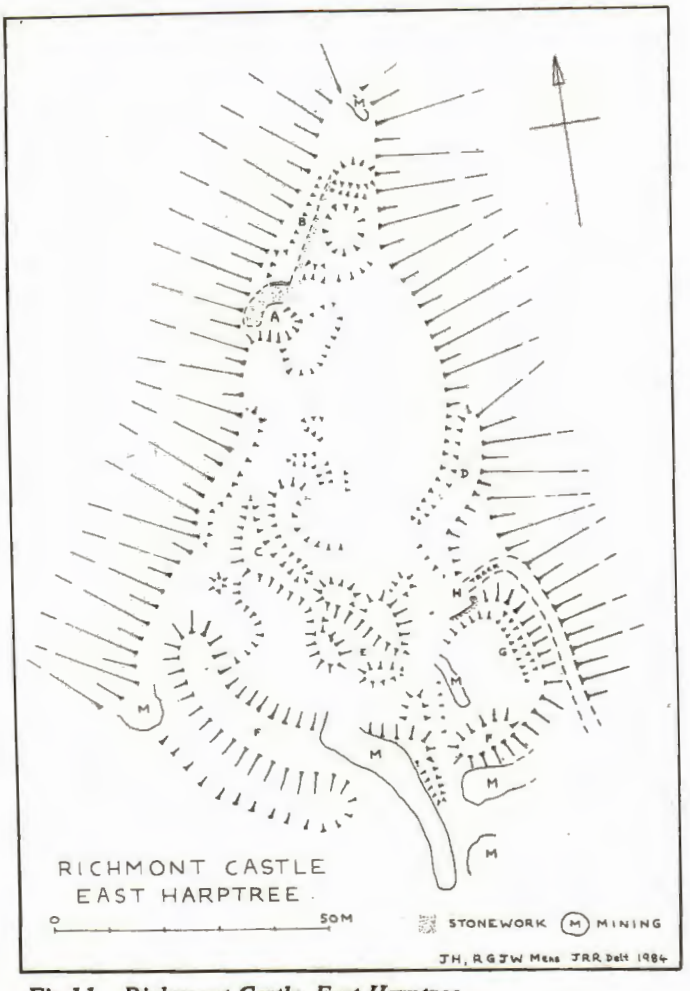

Fig 11 Richmont Castle, East Harptree

east (Fig 11, H). This is the most likely position for the original entrance to the castle, although a stretch of rough walling at this point is probably post-medieval. There is little superficial evidence of medieval occupation within the castle area; the only finds made during the survey were fragments of sandstone roof tile and a single cooking potsherd.

In Harptree Combe to the west of the castle are traces of an earthern dam running across the valley (ST56105582); this may have been part of a fishpond contemporary with the castle, but might equally have been associated with the later lead-mining on the site. (J R Russell)

References

R Athill, *Old Mendip* (1964) 35-36
J Collinson, *A History of Somerset* (1791) 3, 587-589

KELSTON, Manor House (site)

A plan of Kelston manor house and its associated waterworks, including the 16th century water closet constructed by Sir John Harrington was published recently (Edgar and Iles 1981). Subsequently a large hole suddenly appeared in the field between the site of the manor and the fountain (A on the published plan). This hole (at ST6994466920) was dug into by the farmer, Mr Padfield of Park Farm, and running water was found some 3m down in a stone-lined channel. This hole may have occured because the stone tunnel carrying the water collapsed. However, the latter explanation seems unlikely as the hole was quite large and the sides were made up of a loose stoney fill implying that there was a large robbed structure

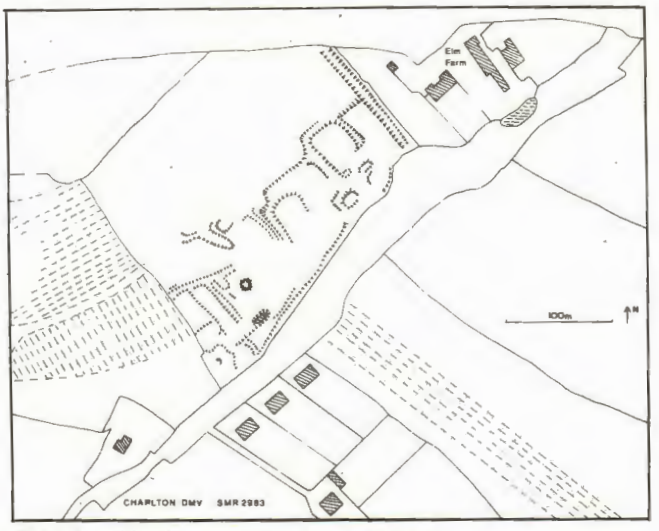

Fig 12 Charlton, settlement remains

here. Could this be the site of Sir John Harrington's famous water closet? In order to get to the bottom of this it was decided to explore the reputed 'tunnel under the churchyard'. This is, in fact, no mere myth recounted by locals to visitors at the village pub. There is a stone-lined water channel running underground from a large pond on the hill above the manor house to a series of fishponds on the other side of the village - a distance of about 400m.

On the north west side of the churchyard (ST6987266885) is an iron door which gives access to a vertical passage leading down into the stone-lined water channel. The remarkable aspect of this is that the channel under the churchyard really is a tunnel, stone-lined with an arched roof about 1.4m high. The tunnel leads north eastwards to a broad chamber (?another possible location for the water closet), just east of the chancel at ST6991566909. Eastwards the tunnel continues as a passage only 0.8m high with a slab roof and leading towards the hole in the field. This exploration only raised more questions (eg what was the Churchyard tunnel for?) but does serve to illustrate the scale of the water system and manor house here. (R Iles)

Edgar J and Iles R, 1981 Kelston Village, Manor House and Garden, *BARG Rev* 2, 66-72

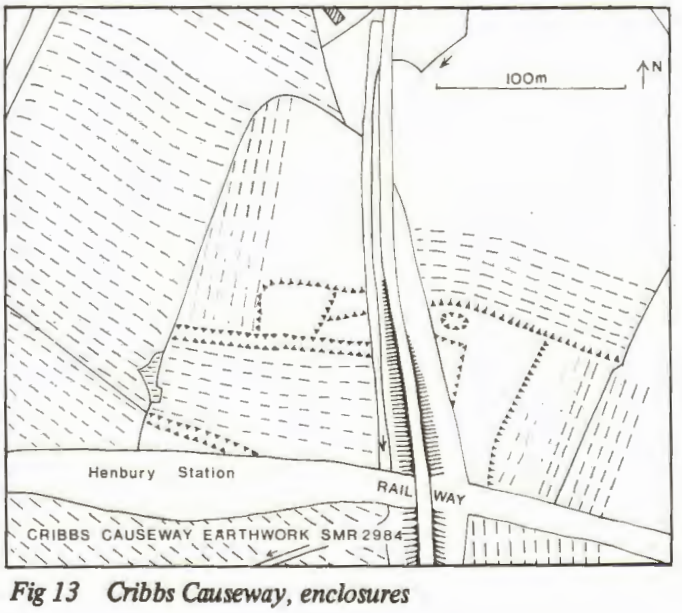

Fig 13 Cribbs Causeway, enclosures

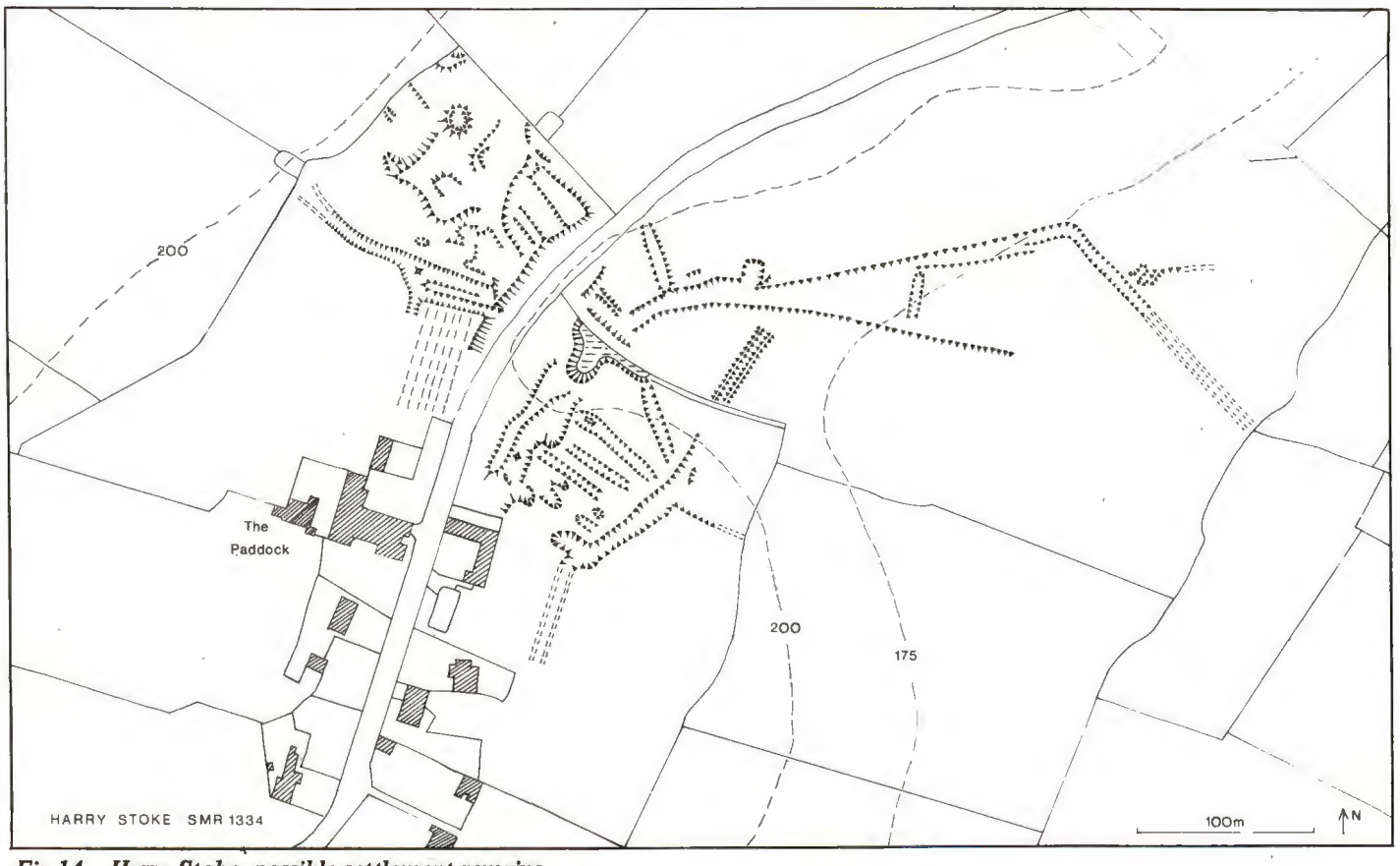

Fig 14 Harry Stoke, possible settlement remains

KEYNSHAM, Keynsham Abbey
Excavation continued by the Folk House Archaeology Society on the western end of the Chapter House which proved to have an ante-chamber. More finely carved Norman masonry was recovered and some pieces, found during construction of the by-pass, were displayed at the English Romanesque Exhibition at the Hayward Gallery, London. (B J Lowe)

NAILSEA, Glassworks, 37, High Street
Excavations took place on part of the site of 'New House' glass cone directed by D J Pollard of ACCES. A considerable length of the 1m thick, pennant stone cone wall was uncovered, revealing inverted stress relieving arches; excavation at one point showed the base of the wall to be 4.2m below the level of the working floor of which only small areas remain. A complete swinging pit, some 2.5m deep and used for the making of sheet glass by the cylinder method, yielded several glassmakers' tools including snips, blowing irons and glass gathering rods together with numerous fragments of cylinder glass. Part of the area of a much larger swinging pit extension to the cone dating from about 1840 was excavated as was part of the "cave" or airway leading to the furnaces in the centre of the cone. Further progress in this area awaits demolition of the bungalow which at present occupies the middle of the site.

NEWTON ST LOE, St Loe's Castle, ST694639
Excavations continued under the direction of C Arnold, for Bath College of Education, on an area of the north west section of this fortified manor house.

NEWTON ST LOE, ST68906353
A fair amount of post-medieval material, mainly 17th and 18th century pottery and glass, was found on a pipeline route, just west of the field system marked on OS maps. (R Iles)

NEWTON ST LOE, ST691633
The deserted medieval settlement, discovered from the air by J Hancock, was crossed by a pipeline but no finds were spotted. The reason for desertion may have been emparkment. No records have been found of a medieval park, but a 1736 estate map calls this area 'Old Park'. To the south is a curving field boundary (area ST69206305) on a slight bank which may have been a park boundary. (R Iles).

PATCHWAY, Patchway Common
A fair amount of fieldwork was undertaken by R Iles in this proposed development area with generally negative results. The only feature of note was a large rectangular enclosure, north of Woodland Road (ST609829), identified on the air photograph (Ordnance Survey, 1969) by J Pullin.

The whole area covered by the Bristol North Fringe Local Plan was examined by searching the available air photographic cover. A number of earthwork sites were discovered and subsequently surveyed. These were mainly the remains of shrunken settlements. From the evidence of the fieldwork and early maps (eg Donn's map of 1769, *11 miles around the City of Bristol*) it would appear that the pre-1900 settlement pattern consisted largely of small green villages. The greens themselves were of various shapes and sizes, though predom-

inantly in the form of a wide village street. There were formerly other small 'green' settlements on the north and eastern edges of the modern Kingswood district. The reason for these greens is not clear although it may be related to a wood pasture economy practised on the fringes of Kingswood Chace. The following sites in Bristol North Fringe Local Plan area were surveyed by R Iles, L Meaney and K Collis, who also drew the plans.

Charlton, ST579799
The village of Charlton, situated to the north west of Elm Farm, is often regarded as a modern desertion. It was removed in 1946 for an extension to the runway at Filton airfield. Charlton consisted of a few farms situated alongside a straggling street green. There are also surviving settlement remains (Fig 12) south west of Elm Farm. They are similarly aligned along one side of a wide street, presumably yet another elongated green. The earthworks are not very striking on the ground but seem to represent about six crofts some with building platforms at the street end (air photograph, RAF, CPE-1869-3008, 1946).

Cribbs Causeway, ST570798
A group of sub-rectangular earthwork enclosures are visible on 1946 RAF air photograph (CPE-1869-3009). They are cut by a main road (A4108) which has been considerably enlarged and altered in recent years. Parts of the earthwork are still visible either side of the new road, but several depressions /platforms either side of the old road have been obliterated. Fig 13 is a sketch plan of the remains from the air photograph. No finds are recorded from the site, but the direct relationship of the enclosures to the surrounding ridge and furrow suggests that it is probably a medieval settlement.

Harry Stoke, ST622791
At the north end of the Harry Stoke hamlet are some possible settlement remains either side of the existing road (Fig 14.) They consist of an amorphous group of earthworks and holloways, one of which crosses the area in an east-west direction. There is a small L-shaped pond in the centre of the earthworks which is called a "Moat" on older OS maps, although this identification is not very convincing. Amongst the earthworks north-west of the road are two or three possible building platforms.

Stoke Gifford, ST625801
In a field midway between Great Stoke and Stoke Gifford were a group of earthworks first noted by J Hunt (*Avon Past,* 1, 33). They are set back from the road behind a line of bungalows. However, it appears that the original road was considerably wider,probably in the form of a street-green. There were, in fact, some remains of house platforms behind the bungalows (Fig 15). The field is currently being developed (mid 1984) and BAARG members have found evidence of medieval and later occupation.

SISTON, Highfield, ST688728
There are house platforms on the brow of the hill on the north side of the A420. (R Iles)

WELLOW, ST74535998-ST74555994
See report under Roman section

WEST HARPTREE, Widcombe, ST5758
An historic landscape survey was made of this manor by V Russett of ACCES (see introduction). It is hoped to publish a report of its findings. The main archaeological discoveries were a shrunken settlement at North Widcombe and some earthworks and former house sites on and around Burledge hillfort.

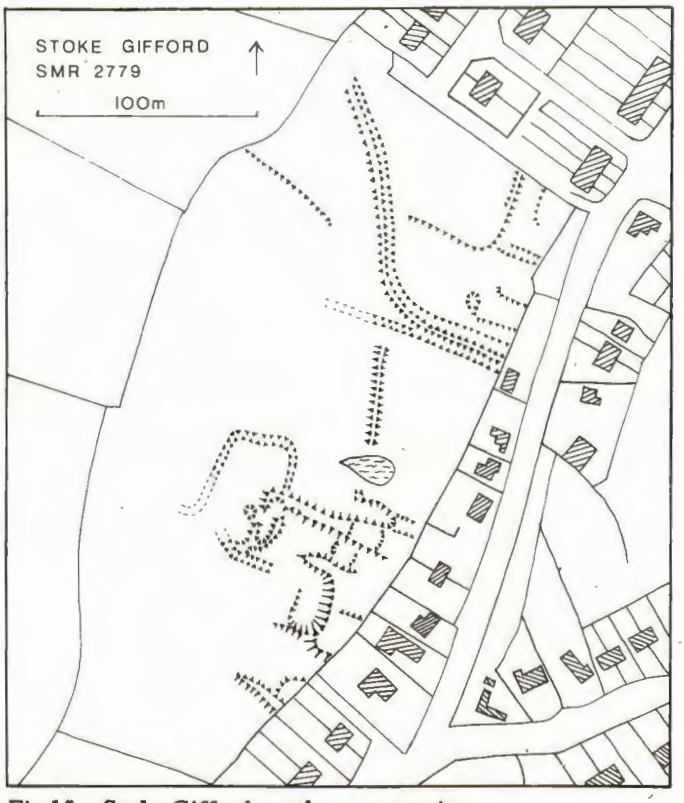

Fig 15 Stoke Gifford, settlement remains

WEST HARPTREE, ST55195556
A visit to the site of some vague marks on a 1947 RAF air photograph by R Iles and V Russett revealed the possible remains of a ploughed out deserted farm. As well as much stonework there were considerable quantities of pottery (late medieval - 18th century) glass and other material.

WICKWAR, Barber's Court Farm, ST709881
There are various earthworks in a long paddock immediately east of the farmhouse. They are possibly the remains of a moat and fishponds. (J Edgar and R Iles)

BUILDING RECORDING

The Listed Building Resurvey, being undertaken by Avon County Planning Department for the Historic Buildings and Monuments Commission, is half completed. The purpose of the survey is merely to note (rather than record in detail) buildings worthy of listing. However, a number of interesting discoveries have come to light including a probable medieval chapel at Woollard, recorded by J Edgar. In Bath a rather unusual buildings survey was undertaken by J Lawes for Bath Archaeological Trust. This was an intensive survey of all the cellars, and of the structures incorporated within them, of the area in and around the Roman Baths including North Stall St, Bath St, West York St and Kingston Parade.

1983 saw the third year of progress with the Kingswood Chapels Survey. This aims to record not only what survives of Kingswood's Free Church buildings but also their docu-

mentary material. The work was begun at a time when some of the chapels had already had to close their doors and others have since followed. Anyone interested in joining the survey team should contact C J Spittal (Tel 773158).

The following is a list of buildings which had detailed surveys made last year. Most of the surveyors deposit copies of their plans with the National Monuments Record and other local depositories such as Record Offices and the Sites and Monuments Record. The dates given below are for the earliest features and subsequent major alterations. The initials of the contributors are: IB-1 Becky; PB-P Brimacombe; JB-J Bryant; RGG-R G Gilson; LH-L Hall; JLL-J L Lawes; ROD-R O'Dare; BW-B Williams; EHDW-E H D Williams.

ALMONDSBURY, 5&7 Lower Court Rd, ST602843
Originally 3 room and through passage, lower end possible byre. 16th century or earlier. LH

ALMONDSBURY, 2 Townsend Lane, ST641842
Originally 3 room and through passage, 16th and 17th centuries. LH

ALMONDSBURY, Washing Pool Farm, Easter Compton
18th century farmhouse. LH

BATH, Abbey Church House, Hetling Court, ST748645
Late medieval building (on site of 12th century Leper's Hospital) within late 17th century house. JLL

BRISTOL, 17, 18&19 Christmas St.
17-18th century incorporating part of 12th century and later St Bartholomew's Hospital. JB.

BACKWELL, Court Farm, ST494684
3 room cross passage house of late 16th-17th century, late 17th century upper end. EHDW, PB

BACKWELL, Hillview, ST492681
Small house with upper cruck roof, early 16th century. 17th-18th century replanning. EHDW, PB

CHEW STOKE, Pear Tree Cottage, ST555612
3 room and cross passage plan, early 17th century. EHDW.

CHURCHILL, Nash House, ST465606
Recorded by EHDW

CLAVERTON, Manor Farm Barn, ST789642
7-bay barn with 4 hammer beam trusses, 16th century EHDW.

CONGRESBURY, Urchinwood Manor House, ST447635
Datestone 1602, though earlier features. Rear wing, mid-late 17th century. EHDW. RGG

CONGRESBURY, The Vicarage (Old Rectory), ST436637
Mid 15th century priest house. Possible that hall originally open to roof with a spiral stair turret to upper floor at east end.EHDS, RGG

CORSTON, Church Farm, ST694653
17th century house with possibly earlier origins. EHDW

CORSTON, Malster's House, ST696653
Recorded by EHDW.

DUNDRY, The Rookery, ST576662
Early 17th century, 18th century. EHDW

IRON ACTON, Acton Court, ST675814
Detailed survey started. 15th-16th centuries. BW, 1B

LONG ASHTON, Chestnut Cottage, 77 Long Ashton Rd. ST550706 Hall gallery, c 1500. EHDW, ROD, PB.

LONG ASHTON, Kingscott Farm, ST521705
Late medieval 3 room and cross passage house. 17th century wing. EHDW, ROD,PB

PILNING, Vine House, ST557859
3 room and through passage house, early 17th century, perhaps converted long house. LH

OLVESTON, Cromwell House, ST601871
Existing features late 16th-17th century but earlier origins. LH

SISTON, Cherry Orchard Farm, ST671745
3 room and through passage, probably 16th century longhouse. 18th century. LH.

TYTHERINGTON, Old Malthouse. ST672882
17th century. LH

BOOK REVIEWS

Village & Farmstead: A History of Rural Settlement in England
by C Taylor, George Philip, 1983.

This book is a milestone in landscape studies and settlement history. In the post-war development of these studies there have been half a dozen or so seminal books which anyone involved in landscape history finds indispensable, of which W G Hoskins' ***The Making of the English Landscape*** must rank as the classic. It was written in 1955 and is now out of date, particularly in the early chapters. It is difficult to see how it can be replaced, since so much research is going on into different aspects of the landscape.

In some ways it is tempting to regard Chris Taylor's book as a replacement for Hoskins', looking at the landscape mainly from a settlement point of view. Perhaps it is more of an interim statement after nearly 30 years of what we now think of how settlements have developed from the earliest times to the present day. It is a monumental and seminal work and because the implications of what it says will seem so revolutionary to most who read it I think it will become a classic. Indeed, the way we look at villages (in particular) and farmsteads will not ever be the same again.

Chris Taylor stresses *continuity* of settlement, drawing no hard chronological lines but emphasising the gradual change and movement in settlement sites and forms. Indeed, the long time scale, complexity in development and constant change are the bases of his thesis. It is a stimulating and challenging book. No one involved in landscape studies or the examination of any village can afford to ignore this volume. What it has to say about post-Roman and medieval settlement developments, in particular, is little short of revolutionary. Villages, as large nucleated agglomerations with churches and manors and their own fields must now be seen primarily as late Saxon or early medieval developments, with activities such as planning and the plantation of new village sites common elements in the landscape. The racial or ethnic origin of villages as 'Saxon' plantations by colonists with 'Celtic' farmsteads in the west is no longer tenable. What emerges is a 'norm' of hamlets, some of which (and only *some* in the classic Midland village belt) become villages. The landscape in some areas is full of abandoned sites, deserted when these agglomerations developed - a process of change from dispersed hamlets to nucleated villages.

Much else in the book is stimulating. The plates are good and of large format (although it is a pity some cover two pages with the inevitable join); the maps and plans are clear and carefully selected. This reviewer found the double column format with extensive captions to illustrations attractive and there is a full bibliography of the key books and articles.

Chris Taylor's areas of research encompass the East Midlands generally (although he has worked in Dorset). There is little from the west of England and nothing specific for the Bristol region. This does not matter, however, as it is the *ideas* which are of such great import in this book.

The book should herald a new era; Taylor's model of changing settlements and forms set against a long time scale, with constant complexity and alteration provides a stimulating challenge to local research in the field of landscape study. Hopefully, over the next decades his ideas will be further tested and it will not be acceptable to write local settlement studies in the way some are produced today.

M ASTON

Excavations at Tower Lane, Bristol
by Eric J Boore. Published by City of Bristol Museum and Art Gallery and Bristol Threatened History Society, 1984.

This booklet describes the results of the rescue excavation at Nos 1 and 2 Tower Lane in 1979-80 and attempts to relate it to some of the documentary sources. The site was a particularly important one to excavate since there were no cellars which would have destroyed all the early evidence. The aims of the excavation were to learn more about the industry of the area and the plan of the houses between the medieval streets of Broad Street and Tower Lane and to find the earliest occupation. The excavation dated the earliest features to the late Saxon period,a major stone building was dated to the early 12th Century and evidence of later Medieval and post-medieval stone and timber buildings was recovered. In the 18th to mid 20th century levels there was evidence of small scale industrial occupation which Mr Boore relates quite well to the documentary evidence. The first section of the booklet gives an account of this area based on inform-mation from various documentary sources and is very useful as background information for this area of Bristol. The next section is a very readable and easily understood account of the various periods of occupation of the site; late Saxon, Norman, Medieval, post-medieval and industrial (18th - 20th century). A large part of the report concerns the Norman House. Mr Boore covers this in some detail and gives a pleasing illustration of a conjectural reconstruction of the Norman house. He mentions other evidence of Norman occupation in Bristol and speculates on who might have lived in the Norman house by referring again to the documentary sources, with special reference to Robert Fitzharding, Lord of Berkeley.

The illustrations of the finds are very well drawn in a life-like form which I think is particularly appropriate for a booklet of this nature. The plans of the excavation are also well produced, but it is unfortunate that the site photographs are not of the same standard. The attempt to closely relate the archaeology of the area to the documentary sources

makes very interesting reading and the general style and layout of the booklet should help to make it very popular.

BRENDA WARE

West country place-names and what they mean: Avon, Somerset and Wiltshire
by Cyril Davey. Abson Books, Bristol, 1983. 38pp. £1.35

The author, a former Methodist minister, has written no less than thirty-five books and booklets, on a wide variety of topics. This latest is intended to fill the gap he found when looking for a simple dictionary of place-names in the West Country. Unfortunately he is unable to do justice to the task and the general reader may well be confused and even misled by Mr. Davey's comments. Most of his explanations are based on entries in the *Concise Oxford Dictionary of English Place-Names* by Eilert Ekwall (4th ed, OUP, 1960). Enquirers would be advised to turn straight to the copy in their local reference library, since Mr. Davey's restrictions of size and simplification have resulted in many misrepresentations. Readers should also be made aware of the existence of the English Place-Name Society's volumes on Wiltshire and Gloucestershire: it is not quite clear whether Mr. Davey is aware of them. An opportunity to explain the significance and use of place-name study to the interested layman has been lost. It is obvious that Mr Davey has little understanding of Old English grammar and vocabulary. He confuses British and Old English words, for instance suggesting that OE *burh* (p6) and OE *clud* ('cloud' as he has it, p34) are of British origin. Neither does he show any recognition that OE *burh* and OE *beorg*, OE *ham* and OE *hamm* are different words with different meanings, though easily confused without reference to the earliest written records: a vital foundation of placename study which he seems to ignore. He likewise has no apparent knowledge of modern theories on personal-names in place-names and on *-ing-* names, as recently summarised and explored by Dr Margaret Gelling in *Signposts to the past* (Dent, 1978).

Further disservice to the reader is done by very cursory proof-reading, which has let through mis-spellings of OE personal-names, misprints, and omissions of Domesday Book references, along with mis-readings of Ekwall. The decision to leave out the earliest recorded spelling of any name, and its constituent elements, means that the reader is left more mystified than ever, the processes of place-name development having thus been concealed and obscured.

The general reader looking for a summary of place-names in the local historical setting should instead be recommended to Dr. Robert Dunning's *Somerset and Avon* (Bartholomew, 1980), especially pp6 - 10. A straightforward introduction to place-name study can be found in Nicholas Gould's *Looking at place-names* (Kenneth Mason, 1978). This is based on up-to-date theories, and explains linguistic developments succintly whilst showing the significance, and not just the 'meaning' of a name. Finally, "there is no reason why a popular reference book should not be authoritative". This quotation comes from the Introduction (p10) to *The names of towns and cities in Britain,* compiled by Margaret Gelling, W F H Nicolaisen and Melville Richards (Batsford, 1970), a dictionary with full and careful explanations linking language, history and local topography, and setting a standard to be aimed at by all who would "put flesh on the linguistic skeleton".

JENNIFER SCHERR

Anglo-Saxon Towns in Southern England
edited by Jeremy Haslam, Phillimore, Chichester, Sussex, 1984. ISBN 0 85033 438 1, 429 pp, 129 figures, £20

Research into Anglo-Saxon towns has been considerably stimulated over the last decade and a half, particularly by the work of Dr David Hill on the Burghal Hidage and Professor Martin Biddle, stemming from his Winchester investigations. Jeremy Haslam contrasts these and other approaches to the study of the Anglo-Saxon town, from the historical geographer's angle to the archaeologist's. The latter feels free to use *all* sources of available evidence to enrich the overall view: however, he has yet (as Haslam suggests) to successfully build adequate models to illustrate his syntheses.

Systematic analysis of relationships of towns to civil or ecclesiastical administrative units, as well as to hundreds, shires, Roman villa estates or town territories, should provide in his view, clues to continuity from Roman or Saxon equivalents. Proto-urban places also need consideration for example as simple 'ports-of-trade' and markets, but lack the objective characteristics defined, for example, by Beresford and Biddle, such as possession of a mint, market, special tenure, special jurisdication, defences (such characteristics are possessed by a frustratingly small number of 'towns' in fact!). Haslam's definition is one where such central places are nodal to communications, ecclesiastical or other administrative frameworks, perhaps harking back to earlier foci or as significant place-names. These he sees as signs rather than descriptions of the places themselves.

Haslam also stresses the topographical approach to the understanding of the surviving physical evidence. The 'systematic application of agreed methods and stated objectives' should produce the patterns Haslam is looking for, the models of Anglo-Saxon town structures and developments which can augment the results of other related studies. This the other authors have tried to do. The result is the obvious but interesting phenomenon that every author has produced his *own* model based on the available evidence which is extremely uneven and variable between counties and towns alike. Is it then too soon to study the origins, topography, institutions, documentation, coinage, structures, defences and so on, together to produce meaningful models? This is a point Haslam himself makes but archaeologically the attempt needs to be made if the study is to progress at all.

Fourteen chapters on the towns of Kent, Surrey, Berkshire, Wiltshire, Hampshire, Somerset, Dorset, Devon and the individual towns of London, Chichester, Southampton, Bath, Gloucester and Exeter, provide plenty of paper and string (but less glue and paint) for a variety of models. These are difficult to summarise, but perhaps easy to contrast. The towns of Kent, like Canterbury and Rochester, have provided rich coffers of ecclesiastical records from which Tatton-Brown has constructed his themes and may fulfil many of the criteria laid down by Biddle such as 'a complex religious organisation', unlike Surrey (by

O'Connell and Poulton) which, overawed by London, has no particularly important urban place, although Guildford had a mint and Staines has early Saxon settlement. Grenvill-Astle develops the proto-urban theme for Berkshire where he discusses 'central places' as well as royal and ecclesiastical centres. The study also includes a survey of the important burghal hidage town of Wallingford as well as accounts of Abingdon, Newbury and Old Windsor. On Wiltshire, Haslam has the opportunity to demonstrate the kind of approach he was trying to propose in his introduction. Of his fifteen 'centres', he notes that all were at or near royal estate centres. Some have Iron Age hillforts and their Romano-British successors close by - the 'type-site' is Bradford-on-Avon, potentially preceded by Budbury and a Romano-British villa. His topographical maps show strikingly the steepness of the knolls on which several Wiltshire sites are located. He is able to see five stages of development in the county: proto-urban (7th - late 9th century); late 9th with Alfred's fortifications of Southern towns; early 10th century with Edward the Elder's newly-founded burhs at Marlborough and Wilton; 10th century, consolidation, founding of mints and reforming of monastries, like Malmesbury; early 11th century, destruction of defences by Canute (eg at Cricklade). This framework is also useful for many other areas in the South. He concluded from this evolutionary pattern that few Wiltshire towns form part of an episode of deliberate urban foundation - they were responses to changing political, ecclesiastical and economic circumstances.

Hampshire's towns are reviewed by David Hinton, who discusses Stockbridge as a rival mint town to Bristol for the production of Ethelred II's *Brygin* pennies. Elsewhere Holdsworth suggests Southampton was actually a prototype for the planned and gridded town in South England. Winchester is seen as the dominant town which indeed it was, particularly after Southampton's decline with the Viking invasions of the late 9th century. From Winchester (and Martin Biddle) of course have derived many of our ideas on what a town should look like, although it is more likely that a town would *not* resemble such an important place as the capital of Wessex and England too closely.

Somerset is covered appropriately by Mick Aston who suggests that very little is in fact known about the towns since so few excavations have been carried out. He makes the point that Biddle's criteria hardly apply in Somerset! We are therefore left with markets, mints and the town's role as a central place. He describes 18 places (Bath is discussed by Cunliffe elsewhere). Unfortunately the figures reproduced poorly in this article and in some cases have been partly obliterated. Aston's main message appears to be that excavation is the only way forward although work on Axbridge, Ilchester, Taunton, Langport, Lyng and South Cadbury have already proved invaluable. Much of the work has already appeared in *Historic Towns in Somerset* by M Aston and R Leech, published by CRAAGS (now WAT) in 1977.

Dorset by Laurence Keen covers 10 towns including Dorchester and Sherborne and there is considerable discussion on royal and ecclesiastical estate boundaries and Dorchester's position as *regia villa*.

Haslam has another attempt at model-building in Devon. Apart from Barnstaple, Exeter, Totnes, and Lydford, there are other places that can be considered central as heads of hundreds. Edward the Elder replaced Alfredan sites by other more accessible but defensible areas such as Pilton (by Barnstaple) and Halwell (by Totnes and Kingsbridge). Again excavation is required to test hypotheses. The tin industry is thought to have been of prime importance to the foundation of towns in Devon. A regularity of planning with bridges and spinal streets is shown in figure 95 by Totnes, Barnstaple, Plympton and Kingsbridge.

Of the individual town studies, London by Dyson and Schofield demonstrates the richness of the available evidence. The foundation of St. Paul's in 604 is seen as revitalising London as a town after a 'dark age' indicated archaeologically by a layer of dark soil demonstrating a lack or reduction of habitation (viz. Bath, Gloucester, Exeter). Late Saxon London was a double burh (with Southwark) with a bridge, a common type for the period. It also had an embankment and a waterfront made famous by recent excavations. Southampton, an international 'port-of-trade' in the 8th and 9th centuries, has produced much more information recently in the Six Dials area to fill out Holdworth's assessment of the earlier results of excavation. A sojourn at walled Roman *Clausentum* during the Viking invasions was terminated by a move to the present site of Southampton where several finds of late Saxon material and a defensive ditch have been made.

Cunliffe's Bath has changed hardly at all recently and there is still little information on an important Alfredan and Burghal Hidage town. Excavation he sees as the answer, but under which Georgian buildings?

The last two chapters on Gloucester (C Heighway) and Exeter (Allan, Henderson and Higham) are of more interest because of large-scale excavations in the last few years. Much of the Gloucester material has already appeared in print. As with London, there is probably a gap in urban life here until the 8th century. By 909, the foundation of St Oswald's minster brought in its wake a mint, royal palace and market. There is a discussion of the street pattern and proposals for excavation at Kingsholm (royal palace) and under the castle for more streets and properties. The parishes of Gloucester, particularly St. Oswald's and St. Mary de Lode's, are shown to relate possibly to hundredal organisation. More excavation and documentary studies of, for example, Llantony priory's records, are thought necessary to further elucidate the history of the shire town.

In Exeter it is thought the Roman buildings did *not* influence later planning as they did in Gloucester. The cathedral site has provided evidence of the early minster church below St Mary Major. Most of the churches post-date the street layout, but are pre-Conquest. New evidence is the recognition of imported French pottery which emphasises Exeter's role as a 'port-of-trade' in the late Saxon period.

Although the chapters vary in approach, this is extremely useful for future work in assessing which are the more effective. There are numerous gaps to fill, the commonest being the lack of purely archaeological data which is most important at this early stage for the dating evidence it can provide. There is also a trend towards the 'central-places-which-fail-to-meet-Biddle's-criteria' but which nevertheless probably influenced their region in many ways. The book's main strength is in the breadth of the studies, the concern of the authors to derive sensible themes from the data and the large bibliography which must cover nearly all there is to read on the subject to date. Gaps there are (including Bristol

and Gloucestershire) but the stimulus the book will give to elucidating work already done and to future work will be its main contribution as the editor hoped could be the case. This reviewer is doubtful whether the county-by-county model is valid at present since the concept is circumscribed by variable archaeological cover and investigative depth between shires and the fact that towns in many cases have less in common with those in their own county than with equivalent hierarchical examples elsewhere. Perhaps this problem will itself stimulate archaeological work in the 'blighted' counties.

Finally, it is odd that neither Hill or Biddle have a word to say (perhaps they have already said enough) and that the opportunity to summarise and synthesise the many contributions, say by the editor, has been missed.

M. W. PONSFORD