THE ROMAN SETTLEMENT AND LANDSCAPE AT KENN MOOR, NORTH SOMERSET: INTERIM REPORT ON SURVEY AND EXCAVATION IN 1993/4

by Stephen Rippon

Introduction

The North Somerset Levels in the Roman Period

A recent study (Rippon 1993) examined the history of wetland reclamation and landscape evolution on all the Severn Estuary Levels. This revealed the considerable extent of Roman settlement in these areas of coastal alluvium, but a lack of fieldwork means that we know very little of their nature, environmental setting or chronological development; in most cases they are simply 'dots on maps'. The North Somerset Levels provide the ideal area in which to carry out a more detailed study of the Roman landscape, since unlike most of the Levels, it is not buried by post-Roman alluvium (Rippon 1992; 1993, 226). Fieldwork by several local archaeologists, including surface collection and the inspection of recently cut field ditches, mean that the broad distribution of Roman sites is known (Figure 11a). Very limited excavation has been carried out on a number of sites (Lilly and Usher 1972), though no palaeoenvironmental work has been undertaken. There are also several earthwork complexes representing 'relict landscapes', notably at Banwell, Puxton and Kenn (Figure 11a). These pre-date the present pattern of fields which are broadly of late Saxon to post-medieval date (Rippon 1993, 254-260; Rippon 1994).

Selection of a Site : Kenn Moor

In 1993, research started on one of these relict landscapes, at Kenn Moor north east of Ham Farm in Yatton, between Weston-Super-Mare and Bristol (Figure11). The site lies at *c.*5.4 m O.D., on Estuarine derived alluvium of the Upper Wentlooge Formation (Allen 1987b). A critical question was the condition of the Levels in the Roman period, and, in particular, whether they were open saltmarshes or reclaimed; because of its low lying location, sites such as Kenn would have been regularly flooded without coastal defences. It has been assumed that the belt of coastal sand dunes between Uphill and Middlehope (Figure 11a) existed in the Roman period (Rippon 1992), though clear evidence for this has only recently come to light. Earth moving at the Royal Terrace in Weston-Super-Mare cut a section into the sand cliff, which revealed two Roman occupation horizons sealing and sealed by blown sand.

Therefore, though the coast south of Worlebury, and presumably south of Middlehope was protected by sand dunes in the Roman period, that stretch of coast between Middlehope and Clevedon shows no sign of ever having had sand dunes; since at least the late Saxon period it was protected by man made sea walls. Before work started at Kenn, the main evidence for the construction of sea-defences and riverside flood banks to protect the North Somerset Levels in the Roman period was the presence of a villa at Wemberham (Figure 11a), and the lack of a post-Roman inundation that affected other Severn Estuary Levels. Many Roman sites on the North Somerset Levels occur as plough scatters (e.g. the numerous sites in Kingston Seymour and Banwell; Figure 11a), though a recently discovered field system at Rust Bridge, just to the west of Kenn does appear to have been buried.

The project also aimed to determine the chronology of the settlement, and its

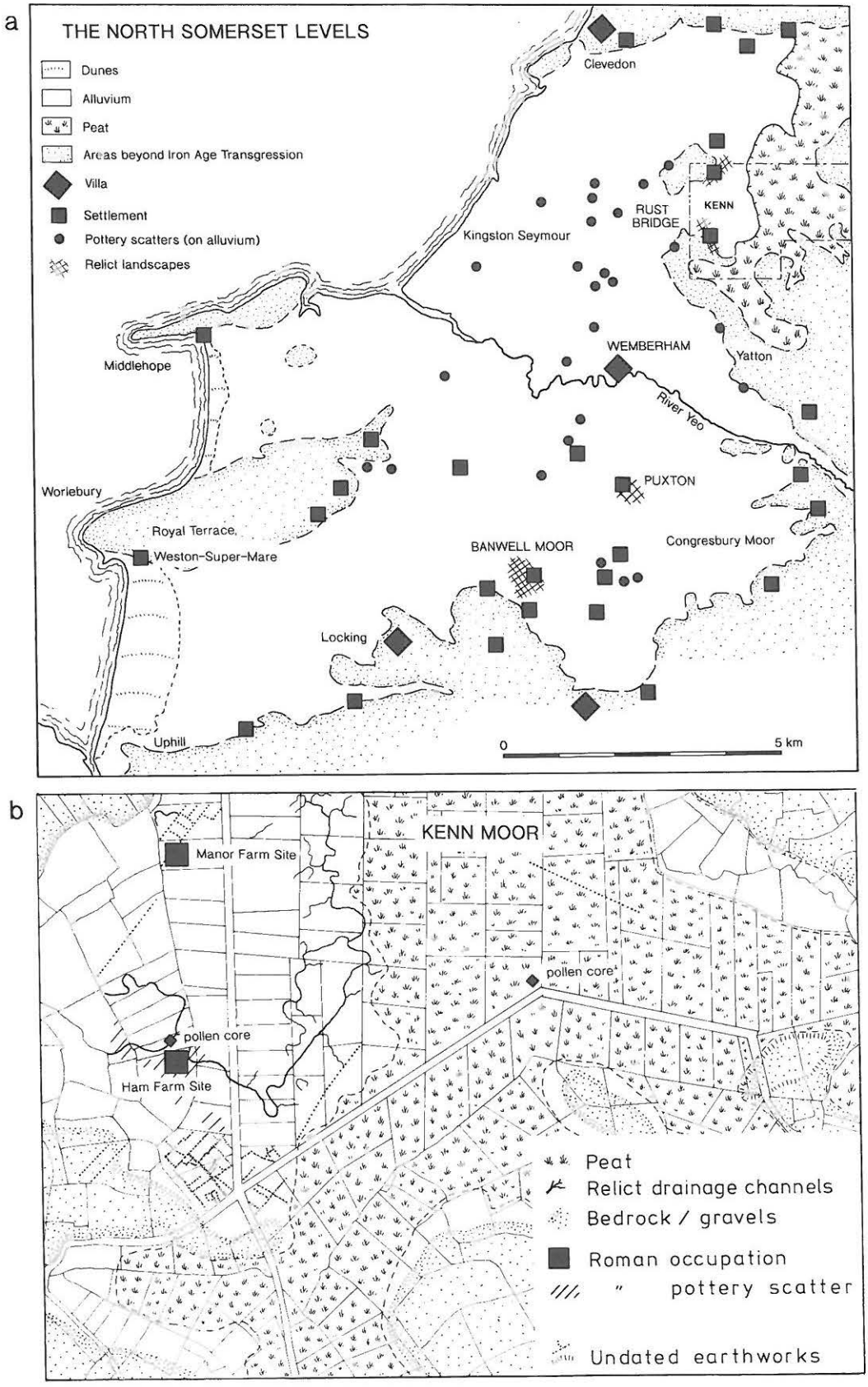

Figure 11. Kenn Moor: Roman evidence from the North Somerset Levels and the Kenn Moor environs.

nature. For example, was this a purely agricultural settlement, or did it have a more diverse economic base, involving salt production, as is the case with Roman settlements in the Central Somerset Levels (Rippon 1991) or iron production, as is the case in the Gloucestershire Levels (Allen and Fulford 1987).

To answer these questions, a well preserved Roman site was required. The site at Kenn was first identified during the 1950s, by the North Somerset Archaeological Research Group. Roman material was collected from a number of ploughed fields, during the construction of an electricity pylon, and from the recently re-cut sides of two field-boundary ditches. Small scale and unpublished excavations scattered over three fields revealed two burials, possible traces of a stone wall and a number of ditches (Lilly and Usher 1972; D. Lilly pers. comm.). Most importantly, a stone structure of a type common in Roman Britain, and generically called a 'corn drier', was uncovered in a complex of earthworks beside a palaeochannel.

It was particularly important to investigate a site with the potential for palaeoenvironmental analysis. Kenn certainly fulfilled this requirement, as the possible 'corn drier' suggested that burnt grain assemblages might be recovered. It was also hoped to sample for pollen and snails, though their preservation on other alluvial sites around the Levels has been rather inconsistent; for example, there were no snails at Rumney Great Wharf and only poor pollen preservation (Fulford, Allen and Rippon 1994). The site at Kenn lies adjacent to a palaeochannel and a peat bog (Figure 11b); both provided the potential for deep pollen cores, providing information on the local landscape and environment (Figure 11b). The peat sequence in Kenn Moor has been investigated in the past, though the upper part, potentially Roman or later, was not examined (Butler 1987).

In order to understand the nature of the site, we needed to know its extent and basic layout. Isolated finds of material have been made over an area *c.* 900 by *c.* 250 m (22.5 ha; Rippon 1992, Figure 21). The full limits of the site had to be established, and it needed to be determined whether the whole site was occupied at the same time, or whether this extensive scatter of material was the product of a smaller settlement shifting over time. To achieve this, the site needed to be fieldwalked and/or very extensively sampled by excavation. The site at Kenn is unusual for the North Somerset Levels in that one particular farmer has a high proportion of fields under plough; many of these fields occur around the periphery of the known distribution of findspots at Kenn Moor allowing the edges of the settlement to be determined through fieldwalking.

However, the core of the Roman site is under pasture, and four of these fields preserve the remains of a formerly more extensive relict landscape (Figure 12). Though none of these features had been dated to the Roman period, it seemed a reasonable hypothesis that they related to the finds of Roman material from the adjacent fields; no medieval material was reported from these plough scatters. The plotting of the extant and destroyed earthworks would not only provide information on the layout of the settlement, but also enable excavations to be located in areas of the highest potential.

THE FIELD EVIDENCE: A SURVEY BY THE ROYAL COMMISSION ON THE HISTORICAL MONUMENTS OF ENGLAND

by W.R. Wilson-North

Introduction and Description

The Royal Commission has carried out a survey of the relict landscape at Kenn

Figure 12. Kenn Moor: The relict landscape from a combination of earthwork and air photographic evidence (RCHME Crown Copyright).

Moor, Somerset, at the request of Dr. Stephen Rippon (Figure 12). The survey comprises two elements; an earthwork survey of the principal fields containing upstanding remains, and an air photographic transcription of the environs (Dyer 1994) amounting to some 40 hectares.

Within the project area, the landscape is characterised by low-lying flat ground with slight local high points which were probably of significance in antiquity. The area east of Meadmoor Rhyne (Figure 12) was unenclosed until the early nineteenth century, when Parliamentary Enclosure created a regimented landscape of neat rectangular fields (Somerset Record Office 1814), within which are drainage dykes and extensive land-drainage systems. Pre-dating this activity, are a number of archaeological features which fall into three categories; relict watercourses or palaeochannels, the Roman 'corn drier' complex, and a relict field system.

The Roman corn drier' complex

This earthwork (National Monument Record No. ST 46 NW 14). surveyed at 1:200 scale (Figure 13), was the subject of excavation in September 1994 (see below; Figure 14). It lies on the southern lip of a former stream course whose drainage properties it may have exploited. The "corn drier" complex comprises a rectangular mound, aligned north-west to south-east, measuring 16.4 by 12 m, and 0.4 m high. Traces of the 1959 excavation are visible as a slight rectangular depression on the summit. On all but its north western side the mound is

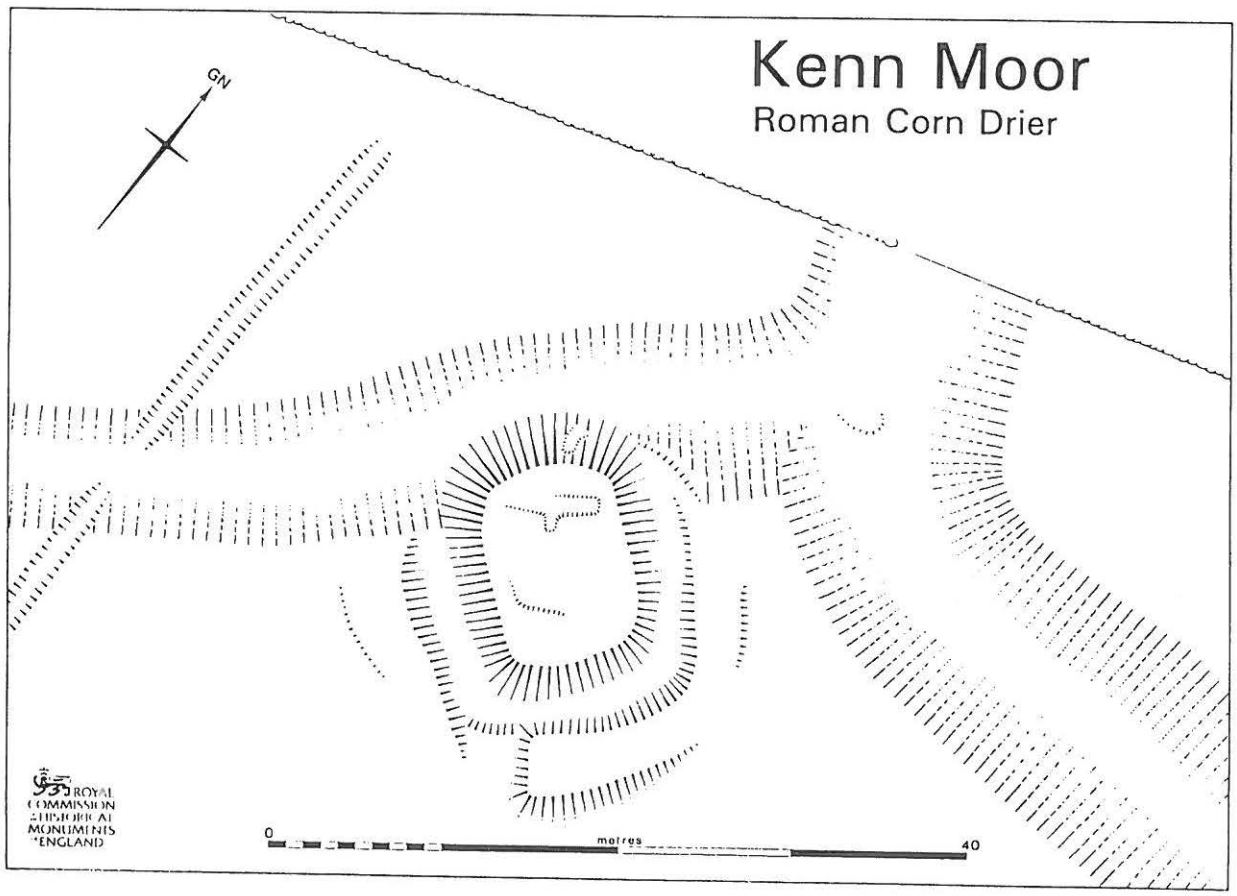

Figure 13. Kenn Moor: 1:200 scale earthwork survey of the Roman 'corn drier' complex (RCHME Crown Copyright).

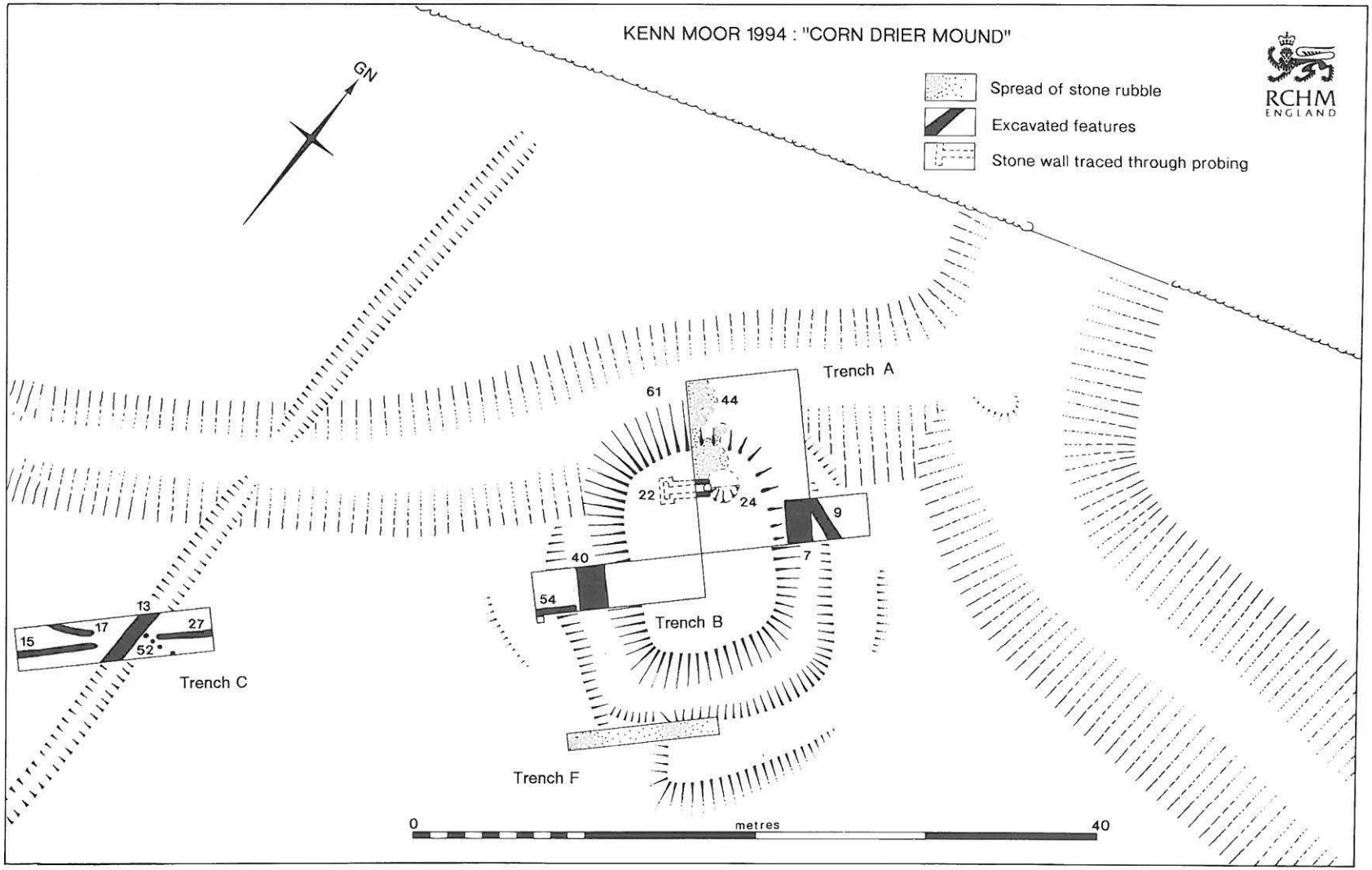

Figure 14. Kenn Moor: Earthwork survey of the Roman 'corn drier' complex (RCHME Crown Copyright) with the location of the 1994 excavation trenches and principal features.

enclosed by a shallow ditch some 1.5 m wide and 0.2 m deep, with a fragmentary bank on its external lip. The remarkable survival of this feature as an earthwork is in part due to its location within a small pasture field which does not seem to have been subject to intensive improvement. The elaboration of this feature, as evidenced by the ditch and external bank, cannot yet be fully explained, nor can the size of the mound.

To the west is a shallow ditch, excavated in Trench C (feature 13), which does not appear to be associated with the 'corn drier'.

The relict field system

This system (National Monument Record No. ST 46 NW 45) covers an area of some 30 hectares (Figures 12 and 15) and clearly pre-dates the early nineteenth century field pattern in the area. It comprises an irregular, roughly rectilinear system of large enclosures with internal sub-divisions. Over much of its area the system has been ploughed out. However, within three fields around the cross-roads by Kenn Moor, it survives as a well preserved, though slight group of earthworks (Figure 15). Here, the system is represented by sinuous, linear ditches with cross divisions. Within it is a concentration of smaller enclosures, which although confused by subsequent drainage, may represent small paddocks and possible buildings.

The date of the field system is uncertain. Rippon (1992) suggests that it is Roman (and see below). Certainly its form, a regular, rectilinear system, is reminiscent of late Iron Age or Roman field systems elsewhere. However, further work is required to fully elucidate the use of this area in the medieval and post-medieval periods, before the earlier landscape context can be fully understood and the field system confidently dated.

Several fragmentary features were identified during field survey, which are on a different alignment to, and clearly pre-date, the field system. Because they are not visible on the available air photographs, their original extent cannot be determined. Their date and function is unclear, but their relationship with the field system is of very great interest.

Detailed interpretation of the earthworks and a full analysis of the landscape must await the full results of the excavations which are due to continue in 1995. Field plans and notes of the survey and the air photographic transcription have been deposited in the National Monuments Record. The archive is available for consultation at the National Monuments Record Centre, Kemble Drive, Swindon, SN2 2GZ; telephone (0793) 414600.

Acknowledgements

The fieldwork was carried out by W.R. Wilson-North, S.A.J. Probert, H. Riley, M.J. Fletcher and H. Chapman. The air photographic transcription was carried out by C. Dyer. Archive plans and publication illustration were prepared by P. Newman. The archive report, from which this account has been derived, was written by W.R. Wilson-North and edited by M.J. Fletcher.

THE EXCAVATIONS

Previous work on Roman settlements in the Severn Estuary Levels has shown that cut features can be extremely difficult to identify in the alluvium unless considerable amounts of material culture/organic matter are present (e.g. Rumney Great Wharf on Wentlooge: Allen, Fulford and Rippon 1992; Northwick on the Avonmouth Level : Barnes 1993). Therefore, the first year's excavations at Kenn were in part an evaluation of methodologies, aimed at determining the nature of archaeological deposits before any commitment to larger scale work.

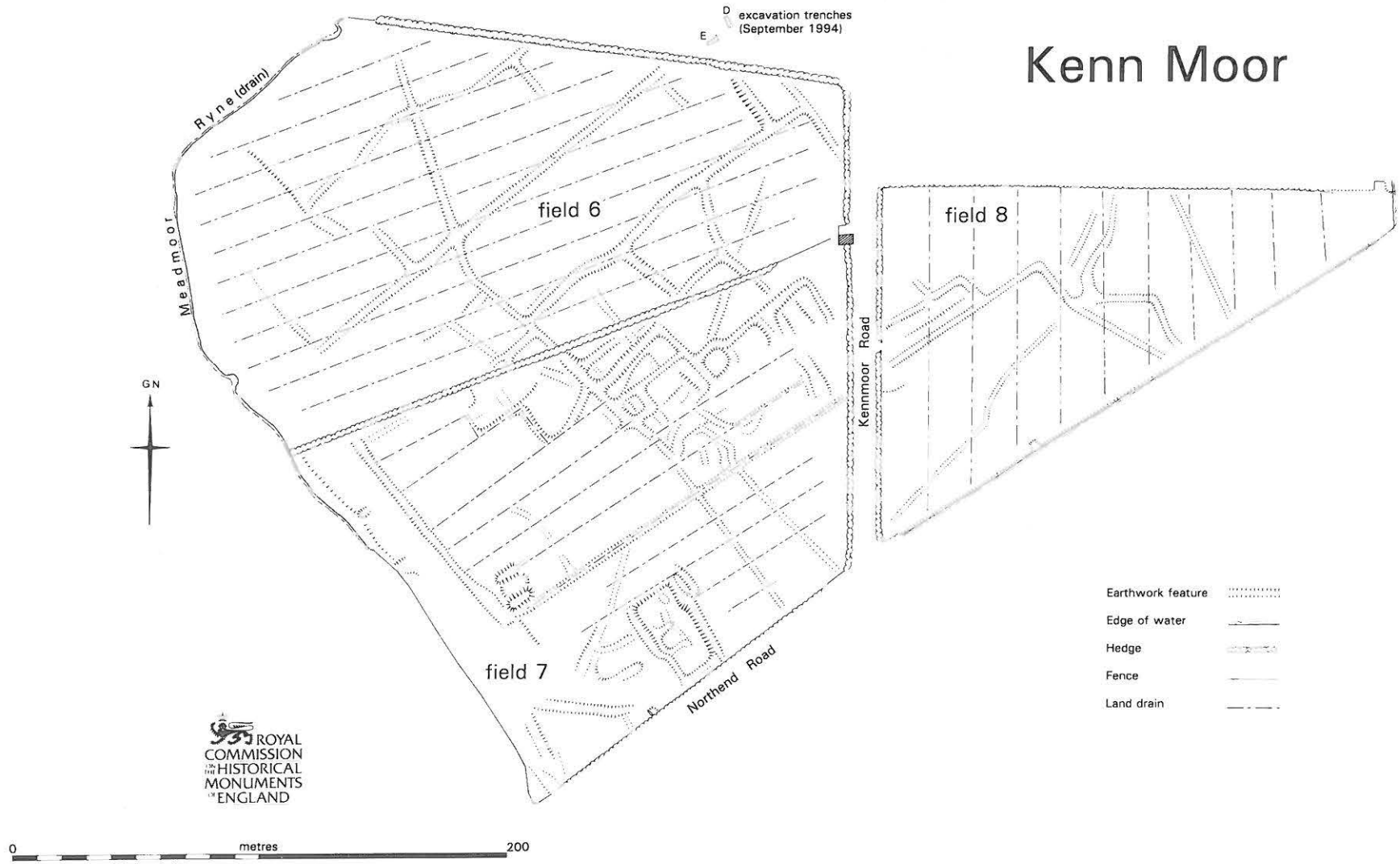

Figure 15. Kenn Moor: 1:1000 scale earthwork survey of the relict field system (RCHME Crown Copyright).

Figure 16. Photograph of 1959 excavation of the 'Corn Drier', showing the T-shaped end (kindly supplied by Mr. D. Lilly).

Earlier excavations on the site proved that there were a range of stratified deposits, structures and cut features; the critical problem was making sure the small trenches to be excavated in 1994 found similar evidence. It was decided that the most appropriate method would be to excavate a number of trenches, of appropriate size, strategically positioned over known features in the relict landscape, either surviving as earthworks or which, though now ploughed out, showed on the air-photographic transcription.

A total of six trenches were excavated in September 1994. Two (D and E) were designed to date elements in the southern part of the relict field system (Figure 15). The others were all located in a field towards the northern limit of the site; three (A, B and F) investigated the 'corn drier' complex, while Trench C was centred on the earthwork ditch to the west (Figure 14). The R.C.H.M.E. plans were of great value in locating these trenches.

The 'corn drier' complex

The stone 'corn drier' was relocated in Trench A, and found to occupy the

northern part of the sub-rectangular mound which lies beside the palaeochannel (Figures 16-18). Photographs of the earlier excavation show that the walls of this structure lay *c.* 0.05 m below the turf (Figure 16). This, along with the excellent preservation of the earthworks, suggests that this area has never been ploughed. The stoke hole, fire box and part of the stone walled flue were all uncovered in 1994. The remaining part of the flue was plotted through probing (Figures 14 and 18), which revealed a T-shaped structure, typical of late Roman 'corn driers' in the West Country (Morris 1979, 20). The flue walls were trench built into the mound, and survived to a height of five courses (0.6 m). The fill had been almost entirely excavated in 1959, though a typed note on the back of a photograph in Woodspring Museum notes that it contained 3-4" [0.075-0.1 m] of 'wood ash'. There were traces of burning around the firebox, though not as much as might be expected, suggesting that this particular structure did not see a considerable amount of use.

To the north of the 'corn drier' lay a spread of stone rubble (Figure 14; layer 44), associated with third to fourth century pottery. This layer included several dressed stones of the same type as formed part of the extant flue structure. The rubble tipped over the edge of the mound and into the top of the palaeochannel (F.61), where it sealed and was sealed by water lain blue clay. When the rubble layer was removed from the surface of the mound, a number of possible post-holes were revealed. Despite careful cleaning nothing similar was found over the rest of the excavated part of the mound, though this is possibly because, where not protected by the spread of stone, the upper horizons of the mound had been disturbed through root/worm action. Therefore, we cannot be sure what the rest of the mound was used for, though a raised platform such as this could have been used as a rick.

The mound sealed a distinctive pale horizon, *c.* 0.4-0.5 m below its surface (*c.* 5.1-5.2 m O.D.). This was loosely called a 'buried soil' at the time, and appears to represent the division between the oxidised mottled blue/brown natural alluvium and more heavily oxidised brown redeposited material. However, the horizon appears not to have been a well developed soil; it was hard rather than soft, and lacked any organic material. Its major characteristic was a lack of brown mottling caused by oxidation, suggesting that it represents the bottom of the redeposited clay, lying on the oxidised 'ripening surface' of the natural.

The mound was surrounded on three sides by a ditch, which was sectioned in two places (Figure 14; feature 7 to the east and feature 40 to the west). In both places the ditch was 1.8 m wide and 0.7 m deep, and was probably dug in order to provide spoil for the mound and then to drain the area. The lower *c.* 0.2 m consisted of lenses of burnt grain and chaff intercalated with alluvium (Figure 19). Julie Jones has briefly examined two samples, both from ditch 7. The samples include wheat, hulled barley and oats, though it is not yet possible to say whether the latter is wild or cultivated. Few grains show signs of sprouting, which may have occurred in the field; a far higher percentage would be expected if the assemblage had come from the malting process. Preservation of the chaff is better than the grain. This suggests that it may have been used as fuel, whereas the grains may have come from the drying floor. Both are now mixed and in a secondary context, in the ditch. Weed seeds have been recovered, typical of arable land (e.g. Fat Hen *Chenopodium album*; dock *Rumex* spp and chickweed *Stellaria media*).

Though a certain amount of pottery and animal bone was recovered from the palaeochannel, very little came from the two sections across the ditch

Figure 17. Flue and stoke hole of the 'Corn Drier', half excavated, looking north. Spread of stone rubble (context 44) in background.

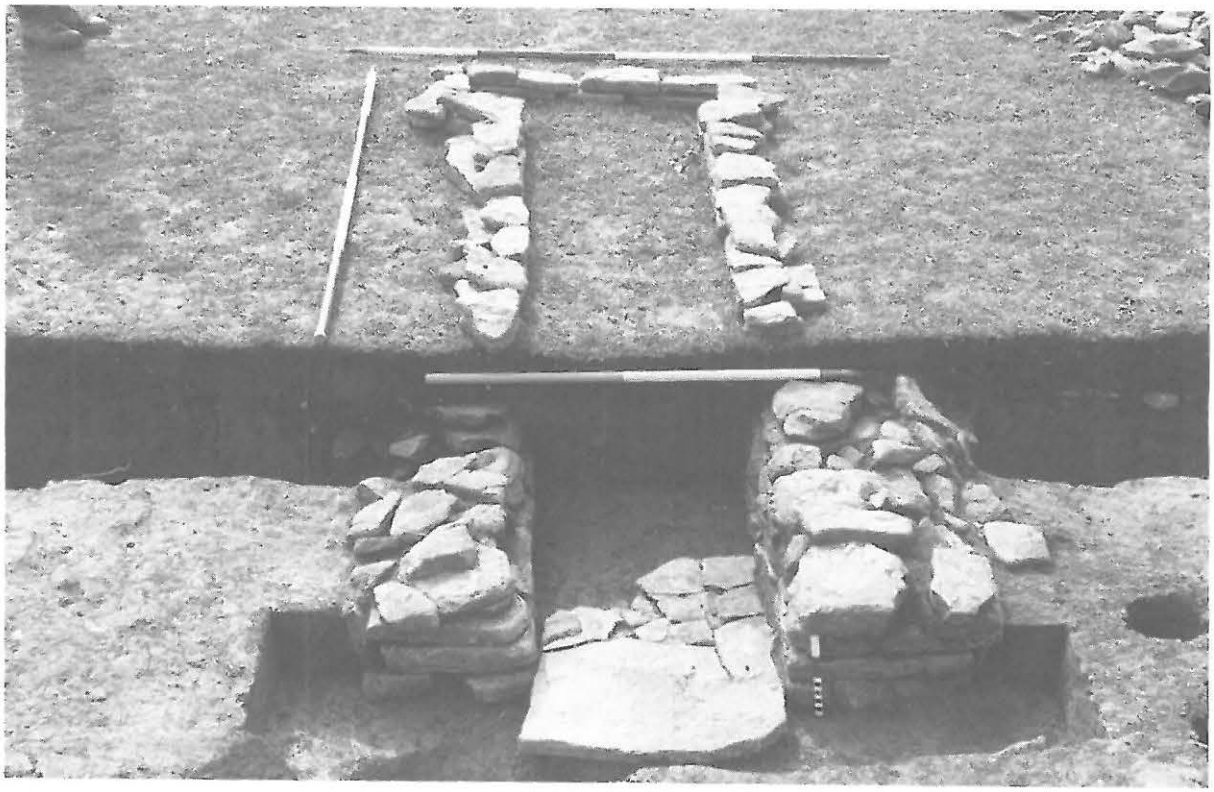

Figure 18. The 'Corn Drier' flue and firebox, looking west. In the unexcavated area, probing has enabled the outline of the remaining structure to be identified (and marked with stone).

around the mound. This suggests that the 'corn drier' complex lay at the edge of the settlement, or at least away from the areas used to dump domestic refuse. Traces of another, shallower, ditch were discovered to the east of the mound; its fill included several fragments of furnace lining.

Very faint traces of a bank can be seen outside the bank, apart from to the south west. Here, a gap in the bank provides the only obvious entrance to the mound. Trench F sectioned this gap and the bank to the east. A general spread of stone rubble was located either side of the gap, suggesting that this was indeed the access to the 'corn drier' complex. At *c.* 5.2 m O.D. these spreads of stone lie at the same elevation as the horizon buried under the mound.

Trench C (Figure 14)

Trench C was designed to investigate of one of the relict landscape features. The ditch (Feature 13) proved to be 1.5 m wide and 0.5 m deep, and showed signs of recutting. Unfortunately, it produced no dating evidence. However, a number of shallow, steep sided and flat bottomed gullies ran up the ditch and then stopped short with butt ends (Features 15; 17; 27); they produced a handful of Roman sherds. These curious trenches, probably spade cut, may have been minor field-boundaries or drainage gullies, similar to the 'grips' that can still be seen on the surface of fields throughout the Severn Estuary Levels. They are similar in form to timber beam slots, though this function is unlikely; would anyone lay a horizontal beam in this clay? Four possible post-holes were also discovered in Trench C, possibly forming a line (F.52). The lack of domestic debris from this trench suggests that like the 'corn drier' complex, it lay some distance from the main focus of occupation/refuse disposal. The light scatter of small abraded sherds from the gullies might suggest a manure scatter, though this need not imply arable cultivation; the modern topsoil produced a scatter of post-medieval/modern material but has certainly not been ploughed since the war, and, considering the excellent preservation of the 'corn drier', may never have been ploughed. Several fragments of tap slag and furnace lining were also recovered from the gullies.

The Relict Field System

Two trenches, D and E, were located *c.* 350 m south east of the 'corn drier' complex, in order to date elements of the well preserved relict landscape at the southern part of the Kenn Moor complex (Figure 15). Though permission was obtained to survey the earthworks in fields 6 and 7, we were not able to excavate. However, the R.C.H.M.E. plot of earthworks showing on early air photographs indicated that certain major elements of the landscape in these fields, continued into field 10 to the north, which has since been ploughed.

Trench D (5.0 by 1.5 m) was located over a major axial north-east/south-west oriented longitudinal element of the landscape. The trench was exactly centred on the ditch which, when sectioned, revealed a sequence of recuts, suggesting a fairly long period of use. The Roman pottery that was recovered suggests a third century date.

Trench E was located over a south-east/north-west oriented lateral element of the landscape. Despite being 5 by 1.5 m (and subsequently extended to the north), when the plough soil was removed, almost the whole area of the trench was filled with archaeological deposits, apart from the north-east and south-west corners. An organic rich horizon lay above a light blue/grey clay. There were subsequently a series of alternate layers of mottled blue/brown and blue/grey clays, all of which appeared to rise in the north-east and south-west corners of the trench.

Figure 19. Section across ditch 7 looking south. Lenses of charcoal (layers 35 and 42) visible towards the bottom.

The explanation for this is probably that Trench E was located close to the junction of the ditch it was intended to section, and the feature sectioned in Trench D. A broadening sometimes forms at the junction of ditches, and Trench E appears to have been located in such a hollow. It yielded over fifty sherds of fresh unabraded Roman pottery, a small amount of animal bone, a coin of AD 270-3, and large quantity of undressed limestone.

Conclusions

The first achievement of the survey and excavation was to produce an accurate plan of the relict landscape and establish that it is Roman. Pottery is broadly dated to the second to fourth centuries, but concentrated in the third. There was no material necessarily post-*c.* 350. Interestingly, this is in contrast to the assemblage from a second Roman settlement on the edge of Kenn Moor, at Manor Farm (Figure 11b). Here, there are a significant number of fourth century regional imports, including some late fourth century forms.

Secondly, it was confirmed that the structure previously excavated was indeed a "corn drier". It is less clear what the remainder of the mound was used for, though it may simply have been a rick-stand and crop processing area. The lack of domestic refuse confirms the pattern established from the earthwork/air photographs that the main settlement focus lay *c.* 150 m to the south; part of this was ploughed in October 1994, revealing a dense scatter of pottery and stone. Only a limited range of material culture was recovered during the 1994 excavations, though this included some animal bone, a fragment of a bone comb, and a small amount of iron smelting slag and furnace lining. This suggests some economic diversification, similar to

other wetland settlements around the Severn Estuary such as Rumney Great Wharf on Wentlooge (Fulford *et al.* 1994).

The wide range of diatom, pollen and snail assemblages should also enable the contemporary landscape to be reconstructed in some detail. In particular, it should be possible to determine whether there was any tidal influence in the landscape, of whether it was completely protected from marine inundation, presumably by sea walls along the coast between Middlehope and Clevedon. All that might be said at present is that the lack of a soil buried under the mound suggests that it was established on the drying alluvial surface, rather than a long established drained landscape.

One curious question is why the Roman settlement was not located on the bedrock outcrop just *c.* 500 m to the south at Ham Farm. Therefore, the next season will see further fieldwalking on these areas, in order to determine the other limits of the site. An extensive contour survey should allow us to say whether the site lies on a slightly raised area of alluvium. The focus of excavation will shift to the south, where extant and now ploughed out earthworks suggest there were possibly two farmstead complexes. It is hoped that this will provide further dating material, as well as a greater range of artefacts with which to determine the nature and economy of the settlement.

Acknowledgements

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Author's address:
Archaeology Department
University of Reading
Whiteknights
Reading
RG6 2AA.