THE SEVERN WETLANDS DURING THE HISTORIC PERIOD

by Stephen Rippon

Introduction

This paper summarises the current state of knowledge regarding the Severn Estuary Levels in the historic period, and suggests some future lines of enquiry. A fuller discussion of the evidence and more detailed references can be found in Rippon 1993 and forthcoming. The rather neglected alluvial claylands south of the Severn Bridge will receive most attention, starting from around the ninth century when evidence suggests the area was recolonised after a period of marine transgression. Although the landscape has continued to evolve through to the present day, this paper will focus upon the medieval period as this is the least understood, yet most critical period in the formation of the clayland landscape.

Firstly, the current state of knowledge on the history of landscape development will be summarised, and four broad types of landscape identified: Roman, medieval irregular and regular types, and post-medieval. Key questions arising from this summary will then be considered, followed by suggestions as to how these problems might be resolved.

An Outline History of Reclamation

From the end of the Roman period, there was a substantial marine transgression that covered many of the Severn Estuary Levels (Rippon 1991b, 45-6). This need not imply a rise in sea-level, merely that there was a breach in sea-defences or the natural sand-dune barrier. The same phenomenon is seen on most British coastal wetlands at this time. Only the North Somerset Levels (Rippon 1992) and most of Wentlooge appears to have escaped the inundation. The nature and extent of this post-Roman alluvium is currently being studied in detail on the Avonmouth Levels by the Wessex Unit (p.27).

By the ninth and tenth centuries water levels appear to have dropped, and a gradual recolonisation of the Levels had begun. The evidence for this is at present very fragmentary, and based on place-names and occasional documentary references. By the late eleventh century most of the higher, coastal areas appear to have been settled, but very little is known of the wider landscape. The best evidence is from Avonmouth, which has a particularly fine series of tenth century charter boundary clauses. Several places referred to have a 'ham' suffix meaning enclosed land; in a wetland context this must refer to a reclamation. Several places referred to in the charters have the suffix 'wick', indicative of settlements. Clearly, much of the landscape was settled and enclosed.

In the twelfth and thirteenth centuries, documentary sources suggest the reclaimed area continued to expand, which the very limited archaeological evidence, mostly in the form of pottery scatters, appears to support. By the early fourteenth century, settlement remained restricted to the same broad region as was occupied in the later Saxon period, but a much greater area would have been drained, including parts of the backfen. Thus, it appears that wastelands between the eleventh century settlements were gradually reclaimed in the form of 'internal colonisation', as the amount of land required to support the growing population increased. Some of the lowest backfens may have seen rudimentary enclosure at this time and certain measures to alleviate the worst of the flooding, but overall they remained, at best, areas of rough pasture.

By the early fourteenth century, documentary sources indicate that large areas of the higher clayland were devoted to arable, and in many areas this is supported by the survival of abundant and well-developed ridge and furrow. An early fourteenth century survey describes the different classes of land-use on Glastonbury Abbey's manorial demesnes (Keil 1964). In Brent, around three quarters of the demesne was arable. In contrast, at Withy to the south less than a quarter of demesne was cultivated, and a very high proportion of the crop was legumes. This indicates that reclamation was more advanced around Brent and that different components of the Glastonbury estate were specialising in varying agricultural regimes.

For Britain as a whole, documentary and archaeological sources suggest the fourteenth and fifteenth centuries saw a decline in the physical environment, with an increased incidence of flooding and coastal erosion (Rippon forthcoming). Population declined, settlements shrank or were abandoned, and there was a shift from arable to pasture.

Around the Estuary, local sources certainly record coastal erosion and increased flooding. The limited archaeological evidence we have also points to the contraction of some settlements, but there is no evidence for a major phase of settlement desertion as is seen on the adjacent uplands. Rather, the Levels appear to have faired quite well, and documentary evidence indicates a specialisation in pastoralism, for whose products Bristol provided a substantial market.

There is surprisingly little evidence for sixteenth century reclamation or settlement expansion on the Levels, a time when documentary sources show that the local population was rising. Indeed, it was around this time that several settlements around Bridgwater in Somerset, may have been abandoned. These sites would certainly repay excavation, not only to establish when they were deserted, but also because their abandonment will have ensured excellent preservation of the medieval horizons.

There was renewed interest in reclamation during the first half of the seventeenth century. Improvements concentrated in two areas; on riverside and coastal saltmarshes, and inland peat moors. In the late eighteenth and early nineteenth century, the final period of large scale enclosure and drainage covered the lowest lying clayland and peat moors. This phase of reclamation is well documented, and will not be considered further (see Williams 1970).

The Resulting Landscape

Taking the Severn Estuary Levels as a whole, the analysis of field-boundary patterns leads to the identification of at least four broad types of landscape. The first type is that of Wentlooge, dating from the Roman period, characterised by very rectilinear blocks of long narrow strip fields (Allen and Fulford 1986; Fulford, Allen and Rippon 1994). This is unique throughout the Estuary.

The other Levels have been gradually reclaimed over the past thousand years, leading to three main types of landscape. The first occupies the higher mainly coastal areas, and has a very irregular appearance. The second type occurs in slightly lower lying areas, and consists of a much more regular arrangement of fields. Thirdly, there are the very rectilinear patterns created in the post-medieval reclamations.

The first of these landscapes is characterised by an extremely complex pattern of small irregular fields and sinuous droveways with extensive roadside waste; this can be termed 'irregular landscape'. The sinuous nature of the field-boundaries results from the incorporation of natural drainage channels. At least on the

English side of the Estuary, it appears to have its origins in the later Saxon period, and continued to be created until the twelfth or thirteenth century. The settlement pattern is often fairly dispersed, though with occasional nucleations.

Roughly oval areas of around thirty acres, defined by the pattern of field-boundaries, provide another distinctive feature of these 'irregular' landscapes (Rippon forthcoming). They appear to represent the earliest reclamations and are sometimes associated with Roman and medieval pottery, and field-names indicative of late Saxon settlements. However, no proper fieldwork has been carried out on any of these sites to determine their nature, and the quantities of pottery recovered are sometimes so small that it is impossible to be sure whether they relate to an actual settlement as opposed to intensive manuring. These sites certainly deserve further attention.

The next type of landscape consists of regularly arranged blocks of strip-fields between long, often curving, and roughly parallel boundaries; these can be termed regular landscapes. They generally occupy lower lying areas compared to the 'irregular' landscape, either further away from the coast or behind outcrops of bedrock and sand dunes. There is little evidence for medieval settlement in areas with these field-systems, and the very limited ridge and furrow tends to be less well developed; this is true of areas in Somerset (Rippon 1993), and further up the Estuary on the Avonmouth and Oldbury Levels (Allen and Fulford 1992, Fig. 12).

These regular landscapes are rather more difficult to date. Some blocks of these regular strip fields are found within the broad zone of 'irregular' landscapes, and appear to represent the final phase of the enclosure and reclamation of such areas. More detailed morphological analysis is required to determine the similarity between these and the undated regular field systems in lower lying areas. Even then, morphology alone cannot establish their date; documentary and field research is required.

Future Research Themes

This brief outline of the history of reclamation on the Levels should have illustrated how we need a much more refined understanding of when reclamation took place. All the landscapes on the Levels are extremely complex, and have a wide range of inter-related elements including field-boundaries, roads, sea-walls and flood banks, major artificial drainage features, deserted farm sites, and ridge and furrow. A detailed analysis of all this evidence, integrated with documentary research, should achieve a much more refined understanding of the chronology of reclamation and landscape evolution.

The ideal methodology is a 'retrogressive analysis' of the landscape. Essentially this involves taking a detailed map of the area, and gradually removing elements of a known, recent, age. The examination of air photographs and earlier cartographic sources can also reinstate early features that have been removed from the landscape in recent times. The pattern of field-boundaries can be broken down into distinct morphological units representing individual reclamations. These can then be dated by means of morphological or metrical characteristics, archaeological evidence and documentary references.

Just such a project is about to begin in Gwent (see Rippon and Turner p.113), but would have a much greater academic value if undertaken on an Estuary-wide scale. This would allow the importance of factors such as the size of each Level, varying land ownership, social organisation, economic hinterland and physical environment to be assessed.

Such a detailed examination would also greatly enhance our under-

standing behind the processes of landscape change. Reclaimed wetlands would be regarded by many as 'marginal' areas, only exploited at times of high population pressure. However, it is increasingly appreciated that marginality is a complex issue, involving not just physical and demographic variables, but social relations, transport and market access (Rippon 1993, Sections 1.A and 6). Most work on the exploitation of 'marginal' areas in the historic period has concentrated on uplands, but the Levels provide an ideal area in which to examine the complex series of inter-related variables concerned with the exploitation of a lowland marginal area. The unreclaimed saltmarsh was certainly 'marginal' for arable farming, but it should not be forgotten that it provided invaluable natural resources including salt and summer pasture. However, once reclaimed, communities on the Levels were able to exploit the fertile soil for both pasture and arable. Proximity to major ports and market towns, notably Bristol, encouraged the development of a strongly specialised pastoral economy by the late medieval period.

Another major problem is which socio-economic groups took the initiative in draining new areas; landowners, their officials, or the local population. How did they go about reclaiming an area, and what prompted them to undertake such investment? Did settlements on the Levels have a distinctive economy? These issues are elaborated in Rippon (forthcoming).

When considering these economic systems, it is important to determine whether the Levels can be regarded as a distinct economic entity, or whether their economy can only be understood in the context of their upland hinterland. The predominance of fen-edge settlements ever since prehistory, ideally located to exploit both wetland and upland environments, strongly indicates that both areas must be considered as one economic system. Any changes in the landscape of the Levels, driven by general socio-economic processes, should also be reflected in upland contexts.

There is also a need to study individual medieval settlements on the Levels, upon which there has been a particular lack of archaeological work. If we are to understand how the landscape has changed over time, we must examine the settlements from which that land was exploited. Changes in how land was used can be expected to have had implications for the settlement pattern as a whole.

For example, there are a large number of deserted settlement sites, but it is not known when they were founded or abandoned. There are numerous possible contexts for their desertion. Firstly, around the tenth century when major landlords in Somerset and particularly Glastonbury Abbey, reorganised some of their estates, sweeping away the existing dispersed settlement pattern and replacing it with a few nucleated villages (Corcos 1983; Rippon, 1993, 180-3); this may also have occurred on the Levels. Some of the place-names suggest they may have been seasonal; thus, they could have been abandoned when these areas were reclaimed as late as the twelfth and thirteenth century. Many may be late or post- medieval desertions; at present there is simply insufficient evidence to say.

To achieve this greater understanding of the settlement history, we require documentary research, and a programme of problem orientated fieldwork, including surface collection and selective excavation. This evidence must be integrated with the retrogressive analysis of the land-scapes as a whole.

These academic questions can only be answered on an Estuary-wide basis. A retrogressive analysis of the landscape could certainly be carried out at this scale, but any intensive fieldwork should perhaps be concentrated into one or two areas,

typical of the rest. In terms of its size and outline reclamation history, North Somerset is certainly typical, but appears to lack some of the types of evidence for the historic period, notably earthworks and documentary sources.

The area that appears to have the best evidence is that part of the Somerset Levels between the Rivers Parrett and Axe, where a limited amount of archaeological fieldwork has already been carried out, where there is an abundance of earthworks, and one of the best collections of documentary sources in the region. This area would also be an important one for research in the Roman period.

Finally we should not ignore the inter-tidal zone in the historic period. The discovery of a previously unrecorded medieval quay structure at Woolaston near Chepstow highlights the potential for a significant number of important historic period sites waiting to be discovered in the inter-tidal zone (Fulford *et al.* 1992).

To conclude, I would like to stress the following points. Firstly, the Levels have an extremely complex landscape, reflecting many centuries of gradual evolution. Secondly, the landscape has preserved a wide range of evidence which if properly deciphered, can be used to trace this complex evolution. Thirdly, a fully inter-disciplinary methodology must be adopted. Fourthly, there are important academic questions that need to be resolved, regarding the exploitation of this wetland environment, and the processes behind the changes that occurred. Finally, there is a need to study these patterns at a regional scale.

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