

The Lincolnshire Marsh, England – landscape reclamation and the salt industry

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Reclamation; salt-production; coastal margins; landscape evolution

The marshlands of the Lincolnshire coast have been exploited for salt-production since the Late Bronze Age. During the early and later Medieval periods it appears that the salt industry was intrinsically linked with the reclamation, settlement and evolution of the region. This paper examines the various factors that influenced the development of this marginal zone.

Introduction

Within the study of wetland archaeology, the study of the coastal marsh zones is a relatively young discipline. The coastal margins of Britain are an intrinsic part of the character of the island country. They are also areas which have seen major changes over the centuries with sea-level fluctuations making this an unstable environment in which to settle. Despite this, these areas have seen settlement throughout time and the struggle of man against the elements makes these regions a valuable area to study to try to understand human interaction with their environment.

The Lincolnshire coastal zone is one such zone that has witnessed extensive changes over the last 10,000 years both physically and culturally and these changes are reflected in the way in which the landscape of the area was exploited and settled (fig. 1). One important resource of the area that has influenced the nature and extent of settlement has been salt. The earliest evidence for salt-production in Lincolnshire has been dated to the Late Bronze Age (Palmer-Brown 1993), with extensive evidence from the Iron Age and Roman periods (Thomas/Fletcher 2001) and again a large body of evidence for the Medieval industry.

The paper discusses ongoing PhD research on this coastal zone and presents preliminary re-

sults of this work. It focuses on the development of the region in the post-Roman period, although the preceding periods will have played a big part in this development.

Previous work on the Lincolnshire Marsh

Early investigations into Medieval settlement along the Lincolnshire coast suggested that permanent settlement was only possible in this wetland environment with the creation of the sea bank defences (Owen 1975). Further investiga-

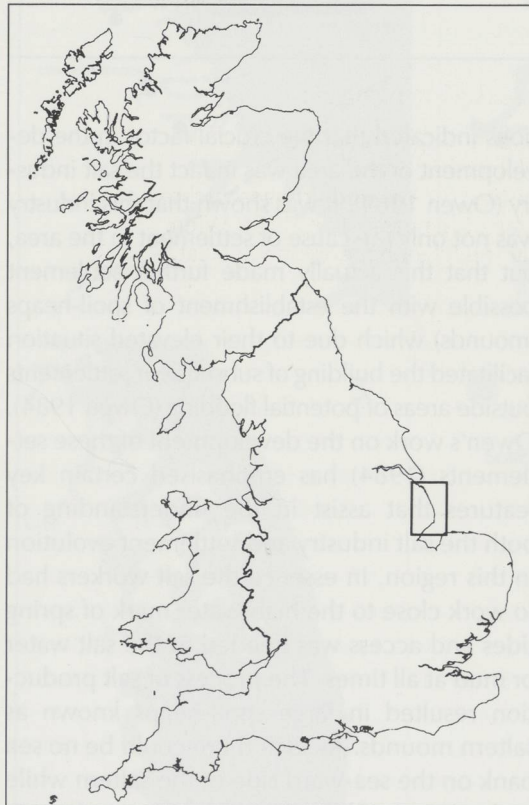


Fig. 1: Location of the Lincolnshire Marsh.

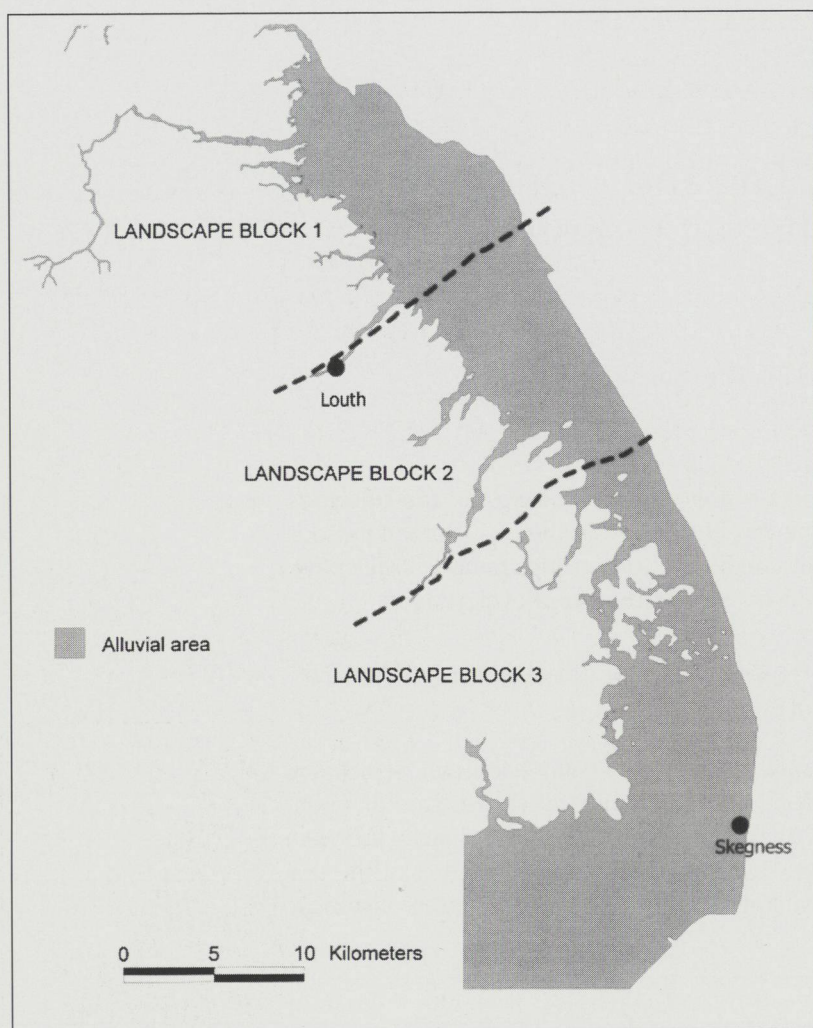


Fig. 2: The Lincolnshire Marsh indicating the three landscape blocks.

tions indicated that the crucial factor in the development of the area was in fact the salt industry (Owen 1984). It was shown that this industry was not only the cause of settlement in the area, but that this actually made further settlement possible with the establishment of spoil-heaps (mounds) which due to their elevated situation facilitated the building of subsequent settlements outside areas of potential flooding (Owen 1984). Owen's work on the development of these settlements (1984) has emphasised certain key features that assist in the understanding of both the salt industry and settlement evolution in this region. In essence the salt workers had to work close to the high water mark of spring tides and access was needed to the salt water or mud at all times. The process of salt production resulted in large spoil-heaps known as saltern mounds. As such there could be no sea bank on the sea-ward side of the saltern while it was in use. The subsequent elevated topography facilitated expansion of settlement fur-

ther into what had previously been an inter-tidal zone.

This feature of settlement development was highlighted in Morris' work "Churches in the Landscape", and linked the development of the churches and hence the settlements in the area to the salt industry (Morris 1989). The churches in the marsh area are often sufficiently large to suggest a certain wealth in the local community. This wealth is often associated with the prevailing local economy such as the "wool churches" of East Anglia.

It was only after such publications as seen above that a more integrated approach has been developed into the development of the region with the salt industry being an integral part of this landscape evolution. For example The Royal Commission on Historical Monuments of England during their survey of the northern section of East Lindsey from Tetney to Saltfleet, linked the salt-working features to other landscape features and considered the development of the landscape as a whole, including aspects such as coastal change and the sea banks and storm beaches of the area (Grady 1998).

Medieval landscape development

"The round groundes at the Easte end of Marshchappell are called mavres and are firste framed by layinge together of great quantities of moulde for the making of Salte. When the mavres grow greate the Salt makers remove more easte and come nearer to the Sea and then the former mavres become in some fewe years good pasture groundes" (Walshaw 1935). This quote comes from a map of the parishes of Fulstow and Marshchapel dated to 1595, drawn by W. Haiwarde. The quote, and the detail on the map, highlight the way in which much of the area of this stretch of coast was reclaimed from the saltmarsh using the waste products of the salt industry. The area to the east of the main road, the possible first sea bank in the area, is shown with many of the saltern mounds still under construction. Salt-cotes occur on the most recently abandoned mounds and it is very easy to see how the land had been reclaimed in the past with the surfaces of the mounds being exploited for arable farming.

The area including Marshchapel, the northern most area in the Lincolnshire Marsh, is the first

of three landscape blocks in the region (the remaining two are discussed below) which seem to exhibit different landscape development when the distinctive elements of the landscape are viewed together (fig. 2). Each of these landscape blocks is examined below through a consideration of the position of settlements, their relation to the geology, the location of "drainage features" such as moated sites, and the associated field systems. Features such as the sea banks and the havens are not considered here as they are discussed in some detail in Grady (1998).

The first area consists of two near-parallel sets of settlements running roughly north-south. The first line of settlement is situated on the edge of the region under study, on the 10 m contour, which corresponds to the edge of the till, where it meets the alluvial area of the Marsh (fig. 3). The settlements include Tetney, North Thoresby, Fulstow, the Covenhams, Yarbrough and Alvingham. These are recorded in the Domesday Book, and some have earlier origins, with Saxon evidence recovered from Tetney and North Thoresby. Many of these settlements have moated sites, often located next to tongues of alluvium stretching into the area of till.

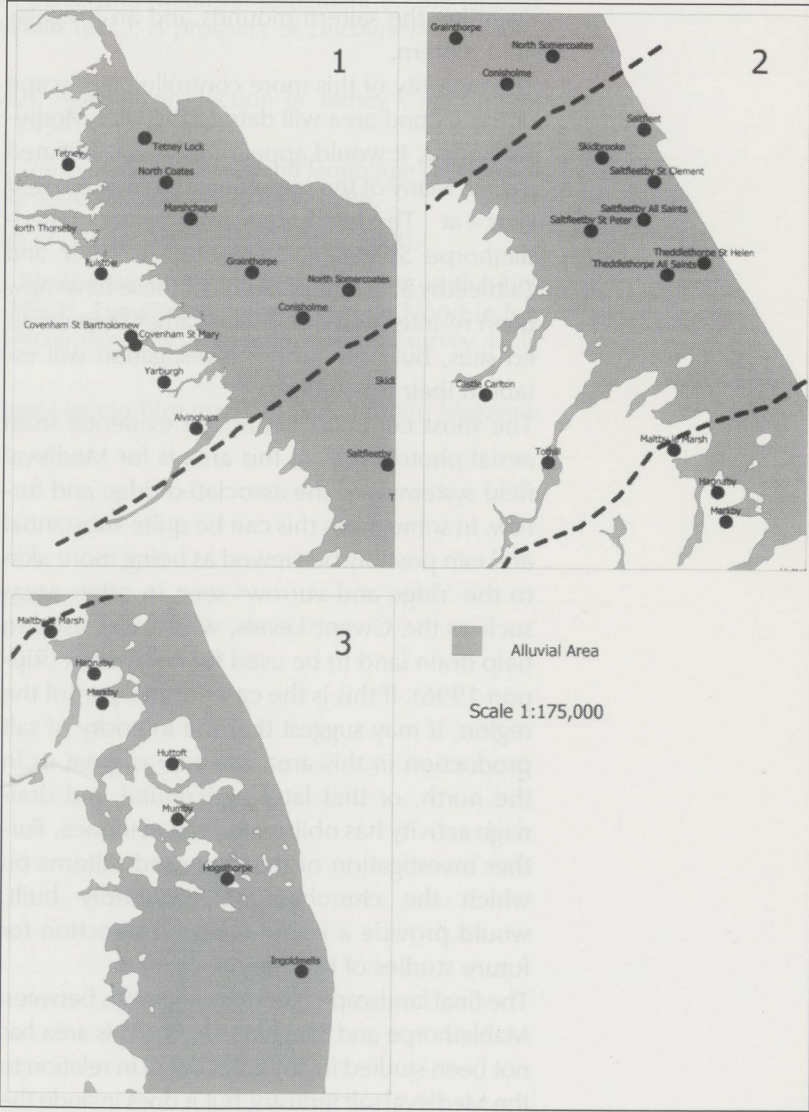
In contrast, the settlements in the second line are not mentioned in the Domesday Book and would appear to have developed in a later period. They also lack features such as moated sites. The settlements include Tetney Lock, North Cotes, Marshchapel, Conisholme and North Somercoates (Grainthorpe, also in this line, is the only settlement to be mentioned in the Domesday Book). The majority of these settlements have developed away from those further inland as daughter villages of the earlier settlements such as Fulstow-Marshchapel, North Thoresby-North Cotes and Alvingham-Conisholme.

In the past this area has received the greatest amount of study and has the best evidence of the salt industry, with aerial photographic data and the BGS survey having plotted many such sites across the area. The evidence from excavations to the west of Marshchapel suggests that Domesday period salt-making activity in the region was located away from the possible Medieval sea bank which it is suggested runs along the line of the main Grimsby road (Fenwick et al. 2001). Pottery scatters recovered from the area of the main road, particularly to

the east of the road in the area of Wragholme, may suggest that settlement at the time of Domesday was located in this area. This may indicate a more complex development than has previously been postulated for the region, with settlements gradually moving eastwards with the abandonment of salterns, and the construction of sea banks occurring only after this abandonment. This is certainly an area that requires more study in the light of the recent discoveries.

The second landscape area stretches from Saltfleet to Mablethorpe and includes the settlements of Skidbrooke, the Saltfleetbys, Saltfleet and the Theddlethorpes (fig. 3). Although this area exhibits a similar development to the area to the north, the evidence of landscape change takes a different form. The settlements in many cases are again daughter settlements of those on the drier areas, but the additional factor of more

Fig. 3: The three landscape blocks with places mentioned in the text.



major waterways crossing the area has played an important role in the development of the region. The Great and Long Eau traverse the region, and their importance in the Medieval period is highlighted by the presence of motte and bailey castles where both of the waterways enter the till areas and become more constricted by the geology, at Toothill, Withern and Castle Carlton. Saltfleet Haven was also an important trading post. The evidence for salterns from aerial photographs is limited, but the churches at Skidbrooke, Saltfleetby St Peters and Saltfleetby All Saints have been postulated as being situated on salterns. This area does not have the characteristic "moonscape" of the area around Marshchapel, where the mounds are still very visible in the flat alluvial landscape. However, a feature which is more striking is its more regimented field systems and road network; the first region has a very "organic" field system with the watercourses and marshy areas surrounding the saltern mounds and an irregular field pattern.

The majority of this more controlled landscape of the second area will date to the later Medieval period, it would appear that it was initiated earlier. Many of the settlements include moated sites – at Theddlethorpe All Saints, Theddlethorpe St Helen, Saltfleetby St Peter and Saltfleetby St Clement. Some of these have now been re-interpreted as drains rather than moated sites, but only further investigation will establish their true nature.

The most common landscape evidence from aerial photographs in this area is for Medieval field systems and the associated ridge and furrow. In some areas this can be quite substantial and can possibly be viewed as being more akin to the 'ridge and vurnow' seen in other areas such as the Gwent Levels, which was used to help drain land to be used for cultivation (Rippon 1996). If this is the case for this part of the region, it may suggest that the intensity of salt production in this area was not as great as in the north, or that later agricultural and drainage activity has obliterated the evidence. Further investigation of the supposed salterns on which the churches are reportedly built, would provide a useful research direction for future studies of this region.

The final landscape block considered is between Mablethorpe and Skegness (fig. 3). This area has not been studied in any great detail in relation to the Medieval salt industry, but it does include the

area of Ingoldmells and Hogsthorpe where evidence of intensive Iron Age and Roman salt production has been recovered. The natural geology of this area is different from that of the other areas being a mixture of outcrops of till and gravels surrounded by alluvium. The areas of till and gravels provide a more stable environment for settlement than other areas of the Lincolnshire Marsh, and many of the settlements in the region are located on them, such as Hogsthorpe, Mumby, Huttoft, Markby, Hagnaby and Maltby le Marsh. Some of these have early origins, with Huttoft being a postulated poly-focal mid-Saxon settlement. The proximity of the till outcrops to the coastline has meant that the area of tidal influence is smaller than in the regions to the north. The area was protected at some time in the past by a large sea bank, a feature that remains to be dated. It has been called the Roman bank, suggesting an early date, but this is most likely due to finds of Roman pottery and coins from the area behind the bank.

The area to the south, around Ingoldmells and Skegness, is mainly alluvial but the evidence of Roman and Iron Age salterns from this region highlights the intensive activity in the region. Medieval salt-making activity is not visible but may be covered by the developments along the coast. Several moated sites are located in this area suggesting Medieval settlement activity and attempts at artificial drainage.

Conclusion

This analysis is in its primary stages, but it demonstrates the varied nature of landscape evolution, with at least three distinct settlement and development zones. Grady (1998) concluded that more work was required to investigate the salt industry and landscape development of the region. He stated that this would need to be multidisciplinary in nature and should be aimed at establishing the relationships between settlement, sea banks, storm beaches and havens, along with further topographical analysis of settlement patterns.

The region of the Lincolnshire Marsh also needs to be placed in a wider context. Recent research by Rippon has explored the nature of the coastal wetlands of Britain and North West Europe (Rippon 2000). This work has identified three broad ways in which coastal marshes have been used by communities in the past

– exploitation, modification and transformation. From the initial study of the Lincolnshire Marsh, it would appear to have a complex development with elements of exploitation, modification and transformation apparent. Further intensive investigation is now needed if we are to develop a detailed picture of landscape evolution of the Lincolnshire Marsh.

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