

Dales, long lands, and the medieval division of land in eastern England*

by Mark Gardiner

Abstract

The long, parallel fields of the marshlands between the Fens and the Humber estuary in eastern England, which are recorded on nineteenth-century maps, were the result of the division of the wetlands that occurred particularly during the twelfth and early thirteenth centuries. Areas of common fen pasture were partitioned between tenants to provide land for grazing and arable. Similar division also took place on the coastal strip and in the peat fen for land for salt-making and cutting fuel. These long strips, known as dales, are compared to similar areas in open fields in parts of Yorkshire and Northamptonshire, which have been discussed elsewhere. It is argued that the field shape is the result of a type of division in eastern England in which considerable emphasis was placed on ease of partitioning land equitably.

One of the distinctive features of the nineteenth-century landscape of the marshes of the east coast of England – the Fens, the Lindsey marshes, and the Humber wetlands – was blocks of land comprising many long, narrow fields or ‘lands’ running parallel to one another. Each block was bounded by features, such as drainage channels or roads, and contained numerous lands only 20 or 30 metres in width, but up to a kilometre or more in length (Figure 1). The field-type was common throughout the marshlands of eastern England, as the first-edition six-inch Ordnance Survey maps demonstrate, and indeed traces of the shallow ditches that separated the lands survived in some places until recent decades. The origin and operation of this distinctive field type have barely been discussed, in spite of its widespread distribution. Equally, although the marshland fields have been compared to those with similar dimensions elsewhere in England, there has been little consideration of whether they might have common origins. The present paper seeks, first, to explain how the marshland came to be divided in this manner; second, to compare it with a similar form of land division in Yorkshire and Northamptonshire; and, finally, to consider whether the process of land division can be related to the social character of medieval agricultural communities.

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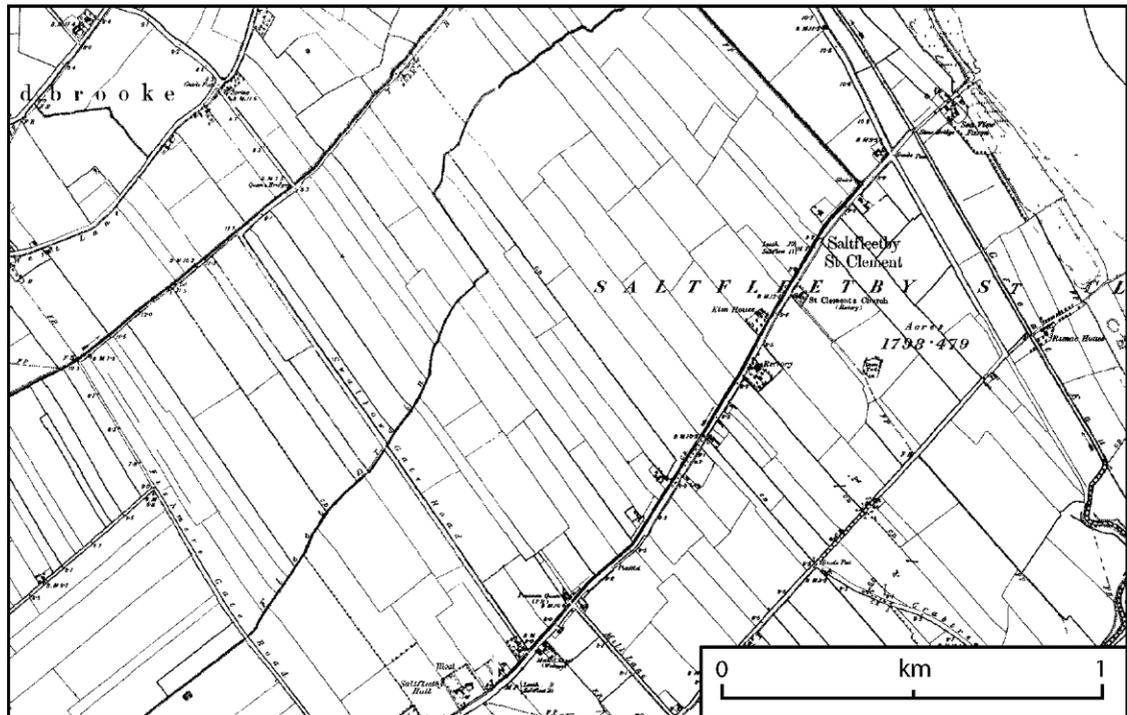


FIGURE 1. The Field Boundaries at Saltfleet by St Clements (Lincs.)

Source: First edition six-inch Ordnance Survey map.

I

The history of the settlement of the Fens and the Lindsey Marshes in the twelfth and thirteenth centuries has been outlined by Hallam and, with the addition of evidence from the subsequent archaeological fieldwork undertaken for the Fenland Survey, it is now possible to suggest the process by which the marshlands were progressively occupied and the wetlands divided. Both historical and archaeological evidence indicate that the earliest medieval settlement in the marshlands was to be found on the highest land lying nearest the sea. These settlements were able to exploit the resources of both the sea – salt could be made on the broad foreshore – and the marsh where animals could be pastured. The value of the grazing on the marshland is already apparent by the early eleventh century, when boundaries were being established, even in the centre of the peat fen. The marsh was progressively divided as it came under greater pressure in the twelfth century, so what had been large tracts open to common grazing by all, were subdivided among lordships and then among individual communities.¹ Only a few areas remained as large commons, such as those at Smeeth and West Fen in Norfolk.

¹ H. E. Hallam, *Settlement and society: a study of the early agrarian history of south Lincolnshire* (1965); David N. Hall and John Coles, *Fenland survey: an essay in landscape and persistence* (1994); Mark Gardiner, 'The transformation of marshlands in Anglo-Norman England', *Anglo-Norman England* 29 (2007), pp. 35–50.

The commoners there agreed to keep the fen at their mutual expense and protect it against encroachments by the men of Wiggenhall who, having divided their own land, were pressing from the east. By the late twelfth century the pressure upon the common land in the Fens was considerable. In 1189 the marshland around Crowland abbey, which had been declared 'in defence' to allow the growth of grass for hay, was 'invaded' by peasants who asserted their rights by setting up temporary houses, grazing animals, cutting alder trees and digging peat. The event led to a well-documented dispute that dragged on for many years.²

Once the common marsh had been allocated amongst the vills, it was then further partitioned between tenants. The marsh was divided into strips of meadow which could be cut for hay and was then subject to common grazing. These divisions were known as dales, and there are numerous references to such holdings in the Fens and Lindsey Marshes in deeds from the mid-twelfth century onwards. The character of the dales is made clear in contemporary deeds. They consisted of long pieces of meadow, usually running between major landscape features. A typical example, recorded in a late twelfth-century charter, lay in a meadow called *Westdaile* in Habrough (Lincs.). It measured five perches wide and extended from the middle of the marsh, with a ditch to the south and another to the north. Another grant at Grainthorpe (Lincs.), of a similar date, concerned 10 acres of meadow, 10 perches in breadth and running in length from *Gaterume* to *Sandwad* (evidently near Sandworth Drain). The deed indicates that the meadow must have been a very long and narrow strip. If the land was measured by the eighteen-foot perch used locally, it would have been 54m in width and 880m long. If it was measured using a twenty-foot perch, which was also in use in the Lindsey marsh, then the dimensions were 60m by 980m. The length of this meadow was not exceptional. A further late twelfth-century deed records a grant, at Stickney (Lincs.), of 6 acres, 5 perches wide, which therefore must have been at least 1050m long.³

Charters record similar strips of meadow, generally described in terms of their width. Their lengths are rarely recorded and their areas are noted only occasionally. Some of the pieces of the meadowland were of indefinite length. A mid-twelfth century grant records that the meadow in Snelland (Lincs.) ran from a ditch around a croft northwards within the fee as far as the edge of the firm marsh. Another charter mentions, even more vaguely, land and moor 4 perches wide stretching from the Ouse southwards as far as any surrounding land or as the adjoining marsh extends (*tendentes ... quantam aliqua terra vel mora circumiacens se longius extendit*).⁴

These strips or dales were commonly bounded by ditches and were so long that they might

² J. H. Bullock (ed.), *The Norfolk portion of the chartulary of the priory of St Pancras of Lewes* (Norfolk Record Soc. 12, 1939), no. 213; D. Roffe, 'The historical context', in A. Crowson, T. Land, K. Penn and D. Trimble, *Anglo-Saxon settlement of the siltland of eastern England* (2005), pp. 266–85; D. M. Stenton, *English justice between the Norman Conquest and the Great Charter, 1066–1215* (1965), pp. 154–211.

³ F. M. Stenton (ed.), *Documents illustrative of the social and economic history of the Danelaw* (1920), nos 279, 170; D. M. Owen, 'Some Revesby charters of the

Soke of Bolingbroke', in *A medieval miscellany for Doris Mary Stenton* (Pipe Roll Soc., new ser., 36, 1960), no. 8; the lengths of perches are indicated in R. Ransford (ed.), *The early charters of the Augustinian canons of Waltham Abbey, Essex, 1062–1230* (1989), no. 443.

⁴ Stenton (ed.), *Danelaw*, no. 233; F. M. Stenton (ed.), *Transcripts of charters relating to Gilbertine houses* (Lincoln Record Soc., 18, 1922), Ormsby series, no. 60; Ransford (ed.), *Waltham Abbey*, no. 514; Stenton (ed.), *Danelaw*, p. xlvi, n. 5, nos 220, 224; F. M. Stenton, *The free peasantry of northern Danelaw* (1969), no. 102.

be further divided and parcels sold off or granted to separate tenants. Dales in Wighenhall St Mary Magdalen (Norfolk) ran from the bank of the River Ouse on the east to Chancellor Dyke on the west, a distance of over 3km. This was inconveniently long and they were subdivided into three or four parts.⁵ In this way parts of a single dale might be used for arable, while the rest continued to be used as pasture. They were sometimes referred to as selions, a term more commonly applied to strips of arable within common fields. There is no evidence to support Hallam's suggestion that the selions in the marshlands were under grass only temporarily. It seems more likely that the term was applied imprecisely to any strip of land, whether arable, pasture or, as may often have been the case, a mixture of the two.⁶

The dales in the east coast marshes recorded on nineteenth-century maps were, therefore, medieval in origin and arose through the division of areas of common pasture. Some earthworks of the boundary ditches still remain even now in pasture fields or, where the land has been ploughed, it may be possible to observe the edges of the dales on aerial photographs as soilmarks. The field evidence and photographic evidence confirms that the dales were typically between 12m and 20m broad (equivalent to between 2 and 4 perches), but on occasions up to 50m wide, and they ran for up to 1.5km in length. These dimensions fit reasonably well with the documentary evidence. The land within the dales was sometimes ploughed to form ridge and furrow in order to assist drainage of surface water.⁷

Hall has argued that the field evidence suggests that dales were very probably being created in the early twelfth century and possibly before the Norman Conquest.⁸ These dates would be consistent with the deeds discussed previously, which mention dales from the mid-twelfth century. However, the method of dividing land in this manner continued until at least the fifteenth century. An agreement was made in either 1448 or 1449 to divide an area at Upwood in Huntingdonshire into similar narrow bands. The waste was measured up and strips about 250m long were allocated amongst the major free tenants and villagers. The latter received meadow in proportion to their holdings: those with one virgate were granted land measuring two perches in width and cottagers received a piece one perch wide.⁹

The twelfth-century deeds refer to the long narrow pieces of land as *dalae* or *deili* or *deiles*, words that derive from Old English *dāl* or the cognate Old Norse *deill*, both meaning a share or portion. A well-known passage in Ine's laws dating to the late eighth or ninth century

⁵ Mary Bateson, 'The register of Crabhouse nunnery,' *Norfolk Arch.* 11 (1892), nos 123–4; see also R. J. Silvester, *The Fenland project number 3: Marshland and the Nar Valley, Norfolk* (1988), fig. 83.

⁶ Hallam, *Settlement and society*, pp. 35, 105, 147; Stenton (ed.), *Gilbertine houses*, Alvingham series no. 16.

⁷ Silvester, *Fenland project*, pp. 64–5; Paul Everson, 'Aerial photography and fieldwork in north Lincolnshire,' in G. S. Maxwell (ed.), *The impact of aerial reconnaissance on archaeology* (1983), fig. 16; David N. Hall, *The Fenland project, number 10: Cambridgeshire survey, Isle of Ely and Wisbech* (1996), p. 186.

⁸ D. N. Hall, 'The changing landscape of the Cambridgeshire silt fens,' *Landscape Hist.* 3 (1981), p. 43.

⁹ J. A. Raftis, *Tenure and mobility: studies in the social history of the medieval English village* (1964), pp. 29–30, 213–14.

¹⁰ Many of the pieces had names with the suffix *-deile*, for example, Ransford (ed.) *Waltham Abbey*, nos 422, 424, 445–6; Stenton (ed.), *Danelaw*, no. 57; K. Major (ed.), *Registrum Antiquissimum of the cathedral church of Lincoln*, V (Lincoln Record Soc. 34, 1940), nos 1641, 1651–2, 1698, 1718. *Deile* was also used as a noun: Ransford (ed.) *Waltham Abbey*, nos 487–88, 491–2; Stenton (ed.), *Danelaw*, no. 169; Major (ed.), *Registrum Antiquissimum*, V,

refers to 'common meadow or other *gedálland*'.¹⁰ The term survived in the local dialect in Cambridgeshire and Lincolnshire until recent times to describe strips of land that were known variously as darlands, darlings, dielings or dylings.¹¹ The term was also used in England to refer more generally to holdings within a common meadow, which in the south of the country were generally known as doles. Common meadows in the medieval and early modern periods were typically divided into a series of long plots. The meadow was closed to grazing from early in the year to allow grass to grow. After haymaking, typically around Lammas (1 August), the meadows were thrown open to the commoners' animals to graze.¹²

The practice in the Lindsey marshes was superficially similar. An agreement dated 1208 states that the meadows in Wrangle held in *deiles* should be enclosed from the first Sunday in Lent until the completion of mowing. After that, it should be open for common grazing, unless anyone wished to ditch their meadow. It is this final clause that suggests a distinction from true common meadow, for it allowed individuals to withdraw their land from general usage and enclose it. The consequence was that the marshland dales might be ploughed for arable, creating a pattern where the land was neither entirely open fields or common meadow, nor holdings in severalty, but a mixture of all of these.¹³

A number of deeds suggest that dales represented a proportionate share of land in the vill. The fifteenth-century agreement at Upwood provided for the division of the land in proportion to the size of the existing holding. A similar division seems to have been made at Reedness in Whitgift (West Riding) on the Humber estuary, where by c.1200 the moor was held in dales stretching across the width of the marsh, each six or twelve perches wide. A number of charters mention that the meadow, pasture, and common was appurtenant to bovates of arable land. One grant makes the provision that, if the arable land was extended and the bovates increased in size, then the granted land should also be increased by the appropriate amount.¹⁴

The dales of meadow and arable were only one of the resources divided amongst the tenants of the vill in this manner. Salt marsh adjoining the coast and areas of peat in the fen were parcelled out in a similar way. The salt marshes, like the pasture of the freshwater fen, had initially been held in common by many vills. The marsh was not protected against flooding and was less valuable, as it could not be used for arable, but served for grazing. The proximity of the sea also meant that the marshland was suitable for salt-making. Initially, the coastal marsh was parcelled out into large areas indicated by ditches, plough furrows or simply by stakes. Later, long strips were marked out running from the dunes through the tidal marsh to the sea. Traces of this can be clearly seen on a map of Marshchapel from 1595 and in aerial

Note 10 continued

no. 1610. Ine's laws are printed by F. Liebermann (ed.), *Die Gesetze de Angelsachsen* (3 vols, 1898–1916), I, p. 106, no. 42, and in translation in D. Whitelock (ed.), *English historical documents, c.500–1042* (1979), pp. 368–69. For other examples of the usage of the term, see *The dictionary of Old English: fascicles A-G* (CD-ROM, 2008), s.v. *ge-dál-land*.

¹¹ Hall, *Fenland project*, p. 185; Hallam, *Settlement and*

society, pp. 151–2.

¹² A. Brian, 'Lammas meadows', *Landscape Hist.*, 15 (1993), pp. 57–63.

¹³ Ransford (ed.), *Waltham Abbey*, no. 486; Hallam, *Settlement and society*, pp. 147–50, 157–8, 168, 171–3.

¹⁴ Stenton (ed.), *Gilbertine houses*, Alvingham series, nos 16–20; Ransford (ed.), *Waltham Abbey*, no. 456; Stenton (ed.), *Gilbertine houses*, Alvingham series, nos 16–49, 51, 55.

photographs.¹⁵ At Fleet (Lincs.) each of the bovates had an appurtenant area of coastal marsh at which salt was made. Areas of peat might also be divided up in this manner and one medieval charter refers to a perch (width) of a turbarry in the soft or wet (*molle*) land at Stallingborough (Lincs.). The tenants around Cottenham (Cambs.) who were granted peat-cutting rights may have been allocated strips of different widths. Tenants with a whole customary holding could make a stack of peat 36 feet in length, those with half a holding were allowed stacks 30 feet long, with progressively smaller lengths down to cottagers, who had stacks 10 feet long. These lengths possibly matched the widths of the strips held.¹⁶

The systematic division of the non-arable resources of the vill has many parallels with open-field systems elsewhere in England. Documents of the early thirteenth century might suggest the emergence or extension of such fields in Lincolnshire. Open fields are later found in the north and west of the Lindsey marsh, but elsewhere on the east coast the pattern seems to have been so flexible, with dales of arable, pasture and meadow so thoroughly intermixed, that Hallam has wondered whether 'the result was scarcely a "system" at all'.¹⁷ We have already noted that a single dale might be used for arable and pasture simultaneously, which implies either that there was no agreed cropping pattern, or that there were many deviations from it. This seems to have been achieved in spite of the problems of fencing long narrow areas, something that would have been necessary if part of a land was used for pasture and the remainder or adjoining lands for arable.

One particular respect in which the marshland dales may have resembled open fields elsewhere in England was the use of the tenurial cycle. This term refers to the allocation of lands in an open field according to a recurring cycle or sequence of tenants. The first land in a furlong was always held by Tenant A, the second land by Tenant B and so on. The same pattern was repeated in every furlong, so that the land of each tenant was always in the same position in the sequence and consequently the neighbours were always the same too. Field books that list the holders of lands are rare before the sixteenth century. The only way to identify the existence of a tenurial cycle in the late twelfth or thirteenth century is to demonstrate that a tenant had similar neighbours wherever their lands were found. Some examples of this have been noted in Lincolnshire at Wyberton and Beesby in the Marsh, and a further instance may be seen at Grainthorpe, though it remains unclear whether tenurial cycles were used widely in this area.¹⁸

¹⁵ A. E. B. Owen, 'Beyond the sea bank: sheep on the Huttoft Outmarsh in the early thirteenth century', *Lincolnshire Hist. and Arch.* 28 (1993), pp. 39–41; Ransford (ed.), *Waltham Abbey*, nos 451, 454, 460–1, 475; Major (ed.), *Registrum Antiquissimum*, V, no. 1711. For map, see E. H. Rudkin and D. M. Owen, 'The medieval salt industry in the Lindsey marshland', *Reports and papers of the Lincolnshire Architectural and Archaeological Soc.* 8 (1960), pl. 1; M. W. Beresford and J. K. S. St Joseph, *Medieval England: an aerial survey* (sec. edn, 1979), pp. 262–5.

¹⁶ N. Neilson (ed.), *A terrier of Fleet, Lincolnshire* (1920), pp. lxviii, 7–17; J. T. Fowler (ed.), *The Coucher Book of Selby* (2 vols, Yorkshire Archaeological Soc. Rec. Ser., 10, 12, 1891–3), II, no. 878; F. M. Page, *The estates of Crowland Abbey: a study in manorial organisation* (1934), pp. 25–6, 164–5.

¹⁷ Hallam, *Settlement and society*, pp. 138, 157.

¹⁸ Hallam, *Settlement and society*, p. 149; Stenton (ed.), *Danelaw*, p. xlvi, n. 4; Major (ed.), *Registrum Antiquissimum*, V, no. 1616.

II

There are clear similarities in the shape of the very long fields in the east coast marshes and lands on the north side of the Humber estuary in the Yorkshire Wolds and Holderness. Comparison has also been made with long selions identified in Northamptonshire. The resemblance to these is less immediately apparent, because in the later middle ages they were divided into shorter lengths and some were reoriented to improve the drainage. However, the fields in all these areas were distinguished by their remarkable length. Beyond noting the similarities of form, there has been little discussion of the reasons for this distinctive field type in eastern England, or examination of the similarities and differences between the three areas of the east coast marshes, Yorkshire and Northamptonshire.¹⁹

The open fields in south-east Yorkshire, like those of Lincolnshire, were divided into numerous long strips or lands that extended for a thousand metres or more from one side of the field to the other, often to the edge of the township, with a break only where they encountered a significant obstacle, such as a deep valley. Lands of up to 2500 yards (2300m) in length were found at Preston in Holderness. Unlike some of the fields south of the Humber, those in Holderness and the Yorkshire Wolds were proper open fields and had regular rotations. The characteristics of the field systems in south-eastern Yorkshire have been discussed in detail by Harvey and Sheppard, and their principal features can be briefly summarized. The lands were not always of equal length, but had a common width. The lands were generally orientated in the same direction within a single field and there were very few separate furlongs. Townships therefore comprised a few large fields containing strips running parallel to each other.²⁰

Studies of many Yorkshire villages have shown that the holdings were arranged in tenurial cycles, but some of the fields, however, were so broad that the cycle of tenants' holdings was repeated two, three or more times before the end was reached. A tenant, thus, held lands at regular intervals across a field. The area of a field containing a single cycle of tenants' holdings was known as a bydale. The vill of Preston in Holderness, for example, was divided into two common fields and each field had seven bydales. The tenants of Preston held a land (or sometimes more) in each bydale and therefore had fourteen separate lands.²¹

The long lands are clearly identifiable in post-medieval records and maps, and may be traced backwards to the earliest surviving charters in the thirteenth century. The origin of this distinctive system of land division remains uncertain. Harvey has speculated on historical grounds that the fields may have been laid out in the early eleventh century; the archaeological

¹⁹ D. N. Hall, 'The origins of open-field agriculture – the archaeological fieldwork evidence', in T. Rowley (ed.), *The origins of open-field agriculture* (1981), pp. 31–2.

²⁰ See the articles and papers by M. Harvey, *The morphological and tenurial structure of a Yorkshire township: Preston in Holderness, 1066–1750* (1978); ead., 'Regular field and tenurial arrangements in Holderness, Yorkshire', *J. Historical Geography* 6 (1980), pp. 3–16; ead., 'Regular open-field systems on the Yorkshire Wolds', *Landscape Hist.*, 4 (1982), pp. 29–39; ead., 'The origins of

planned field systems in Holderness, Yorkshire', in Rowley (ed.), *Origins*, pp. 184–201; ead., 'Planned field systems in eastern Yorkshire: some thoughts on their origin', *AgHR* 31 (1983), pp. 91–103; ead., 'Open field structure and landholding arrangements in eastern Yorkshire', *Trans. Institute of British Geographers*, new ser., 9 (1984), pp. 60–74; and J. Sheppard, 'Field systems of Yorkshire', in A. R. H. Baker and R. A. Butlin (eds), *Studies of field systems in the British Isles* (1973), pp. 145–87.

²¹ Harvey, *Preston in Holderness*, pp. 5–10.

evidence from Wharram Percy in the Yorkshire Wolds points to the village being established in the tenth century and the associated fields laid out either at that time or later, perhaps in the twelfth century. The dating evidence for the organization into bydales is equally unclear. The tenurial cycle could date to the period when the lands were laid out or might have been established subsequently. The only indication of date comes from names of the bydales at Preston in Holderness, which were evidently derived from tenants holding land there in the late thirteenth or mid-fourteenth century. This suggests that the bydales were established by that time and possibly earlier.²²

The similarities between the Yorkshire fields and those in the marshlands discussed above are obvious, though there were also significant differences that will deserve discussion. The fields in both areas had a similar form and were parcelled out in a like manner, according to a tenurial cycle. The Yorkshire lands were often less straight and deviated to go around features such as valleys, but that was, no doubt, because it was more difficult to lay out straight lands on the rolling ground of the Wolds than on flat marshlands. The term 'bydale' is also notable and bears comparison with the dales in Lincolnshire marshland. Harvey suggests the word was derived from Old West Scandinavian *by* meaning a farmstead or village and Old Norse *deill*, discussed above, meaning a share or portion. The element -dale is found in a number of field-names in Yorkshire, just as it was in Lincolnshire. For example, a 1563 survey of Butterwick in the Yorkshire Wolds mentions Kirkdale, Medeldales, Northdales and Thorpdales, amongst others.²³

Long lands have also been identified in Northamptonshire but, as has been noted, they were later divided into conventional, shorter furlongs. However, sufficient cartographic and fieldwork evidence has been assembled to show that the open fields were initially laid out in a very similar manner to those in Yorkshire. Hardingstone near Northampton provides a useful example of the method by which the earlier, medieval pattern can be reconstructed (Figure 2). A detailed record of the position of strips is given in a 1660 field book and careful study of this reveals an underlying tenurial cycle of 32 lands. Aerial photographs shows that the orientation of some of the strips has been altered, probably to achieve better drainage. When the earlier pattern is plotted, it is apparent that the furlongs were originally laid out in a north-south direction in one half of the vill and east-west in the other half, with the two separated by a road. The tenurial cycle had long been forgotten when the tenants were recorded in 1660, but the original sequence, which must have been established when the fields were still divided into long lands, can be reconstructed.²⁴

Similar patterns have been uncovered in other Northamptonshire vills, suggesting that long lands were once common throughout the county. At Raunds, in North Dale field, lands measuring 1000m in length were later divided into six separate furlongs. Survey work at Doddington has shown the alignment of nine later furlongs, suggesting that they were

²² Harvey, 'Open field structure', pp. 70–3; ead., 'The development of open fields in the central Vale of York: a reconsideration', *Geografiska Annaler* 67B (1985), pp. 41–3; P. A. Stamper and R. A. Croft, *Wharram: a study of settlement on the Yorkshire Wolds*, VIII, *The South Manor area* (2000), p. 198; M. W. Beresford and J. G. Hurst, *Wharram Percy deserted medieval village* (1990), pp. 78,

95; Harvey, *Preston in Holderness*, pp. 11–13.

²³ D. N. Hall, *Medieval fields* (1982), fig. 32; Beresford and Hurst, *Wharram Percy*, fig. 71; Harvey, *Morphological and tenurial structure*, p. 25; ead., 'Open field structure', fig. 2.

²⁴ D. N. Hall, 'Hardingstone parish survey 1972', *Northamptonshire Arch.* 15 (1980), pp. 119–32.

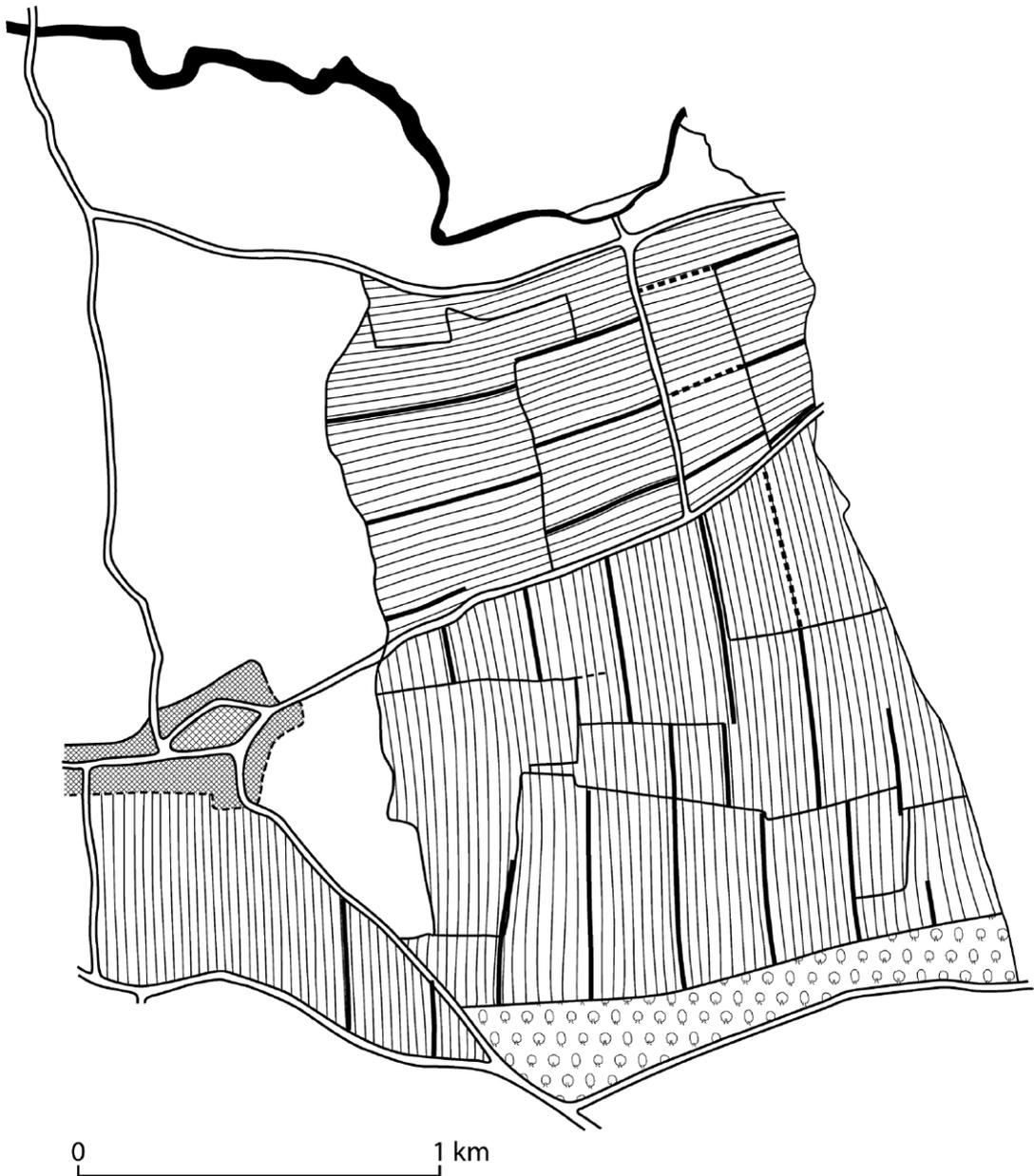


FIGURE 2. Probable form of the open fields at Hardingstone (Northants.)

Note: A reconstruction of the field form in the early thirteenth century. The strips of land are too numerous to show individually and are depicted schematically. The division of the long strips of land in the two original fields (separated by the road) into shorter furlongs had already begun. The start of the tenurial cycles are marked by a darker line. Adapted from Hall, 'Hardingstone', p. 127 and Hall, *Medieval fields*, p. 54.

originally laid out as continuous long lands, again providing evidence for large-scale planning.²⁵ ‘Dale’ names are common here as well, though Hall, who has discussed the Northamptonshire examples, attributes them to Old Norse *dalr* or Old English *dæl*, ‘valley’. Neither seems very likely as the source of common field-name element in Northamptonshire, as both elements are generally found where Scandinavia settlement was more extensive. It is more probable that ‘dale’ names in that county are from OE *dál*, ‘share, portion’.²⁶

III

In each of the areas examined – the coastal marshes of Lincolnshire, Cambridgeshire and Norfolk; eastern Yorkshire; and Northamptonshire – a common pattern of early land division has been identified. The cultivated land or pasture was divided into unusually long holdings stretching for a kilometre or more, often extending to the limits of the township. These long lands were aligned in the same direction, occupied a small number of fields, and were subdivided into few furlongs in contrast to open fields elsewhere in England. The order of tenants holding lands can often be shown to have followed a tenurial cycle. Yet, these similar features should not blind us to significant differences. The dales in the Fens and Lindsey marsh were laid out by converting common pasture to holdings of meadow and arable. They did not form conventional open fields, and were treated in some areas almost as holdings in severalty. There are also possible differences in date. The formation of the long lands in Northamptonshire and Yorkshire has been attributed to dates between the ninth and eleventh centuries, though this remains very uncertain. The marsh dales were definitely established by the twelfth century, and in some areas by the mid-eleventh century, though areas of marshland continued to be divided in that manner until at least the fifteenth century.²⁷ Further differences developed in the centuries after the lands were established. In Northamptonshire the long lands were generally divided into shorter lengths. This also happened, though less commonly, in Yorkshire and the east coast marshes, though in the latter they still were much longer than most open field selions.²⁸

In spite of these differences, dales or long lands can now be recognized across a broad swath of eastern England. There are obvious similarities between the long lands in the Yorkshire Wolds

²⁵ D. N. Hall, ‘Fieldwork and field books: studies in early layout’, in B. K. Roberts and R. E. Glasscock (eds), *Villages, fields and frontiers: studies in European rural settlement in the medieval and early modern period* (British Arch. Rep., International Ser. 185, 1983), p. 118; Hall, *Medieval fields*, pp. 48–50; id., *The open fields of Northamptonshire* (1995), fig. 12.

²⁶ M. Gelling and A. Cole, *The landscape of place-names* (2000), p. 110; Hall, *Open fields of Northamptonshire*, p. 124; id., ‘Hardingstone’, p. 126.

²⁷ Hall, *Open fields of Northamptonshire*, p. 137, suggests a date of the ninth century for the Northamptonshire fields, but S. Parry, *Raunds area survey: an archaeological study of the landscape of Raunds* (2006),

p. 133–4, is more cautious and suggests merely ‘a late Saxon origin’ but, because the pottery has a date range of 800/850–1100/1150 (p. 136), the fields might have been laid out as late as the early twelfth century. Harvey, ‘Regular field and tenurial arrangements’, pp. 11–16, initially favoured an eleventh-century date for the Yorkshire fields, but later (ead., ‘Planned field systems’, p. 97) suggests a date of the late ninth or early tenth century. For the Fens, see Hall, ‘Changing landscape’, p. 43, 44–5.

²⁸ W. Matzat, ‘Long strip field layouts and their later subdivisions: a comparison of English and German cases’, *Geografiska Annaler* 70B (1988), p. 138; Harvey, ‘Regular open-field systems’, pp. 31–2.

and Holderness, and those on the opposite side of the Humber estuary in the Lincolnshire marshes. Similar fields can be found all the way down the coastal marshes through Lincolnshire as far south as the Wash and in the adjoining areas of the Cambridgeshire and Norfolk Fens. The occurrence of long lands in Northamptonshire is more difficult to interpret. It is not clear from current research whether these represent an isolated extension of the distribution into the East Midlands, or whether further work in adjoining counties might show a wider occurrence of long lands. In those places where long lands were subsequently divided into conventional, shorter selions, they are certainly more difficult to recognize and can only be identified by analysing the tenurial cycles and alignments of furlongs.

A number of interpretations have been offered to explain the distribution of this distinctive field type. Hall suggests that they resemble the Danish practice of *bolskifte* and speculates that they might have been introduced from that country to England by Viking settlers in the tenth century. The arguments in favour of *bolskifte* or a similar Swedish system of *solskifte* rely very largely upon the use in medieval England of the terms *versum solem* and *versum umbram* (towards the sun, towards the shade) to describe the position of land to the south and east, or the north and west. Similar descriptions were used for Swedish *solskifte*, but this hardly seems to prove a common origin, particular as the terms were widely used across England, including areas which were not settled by Scandinavians. Instead, it is more appropriate to consider the particular circumstances in England that might have led to the development of this system of land division.²⁹

Central to any discussion must be an explanation of why it was thought useful to adopt such remarkably long strips of land. These strips cannot have been determined by the requirements of agriculture, since they are found on a variety of different soils, both heavy and light. The length cannot, therefore, have been a reflection of the distance that oxen could plough without resting. Furthermore, any benefit gained from the length of the lands, such as the need to turn the plough team at the end of the furrow less frequently, was lost when they were later subdivided into shorter lengths. This took place in a number of areas, particularly Northamptonshire. Long strips of land are also found in meadow and pasture, on marshes and the seashore, so ploughing is unlikely to have been an explanation. The long narrow form of the marshland dales had no particular benefit for the mowers of hay. Indeed, the elongated field shape was particularly difficult for ditching or hedging because of the very long perimeter. There is no agricultural explanation that seems to cover all these circumstances, and instead it is necessary to look for reasons arising from the division of land.

The partition of a large area into a series of long strips greatly simplified the problems of equal or proportionate division of land. No complex surveying was required, nor was it necessary to calculate the total area of land accurately. The area could be divided by measuring along one side and then dividing the length between the number of tenants. This was the method adopted at Upwood and, since the allocated land did not account for the full length of the field, the small area remaining was left as common. Having established the width of the holdings, the parcels could then be laid out by setting out the boundaries as straight lines at right angles, something

²⁹ Hall, *Open fields of Northamptonshire*, pp. 123, 132; S. Göransson, 'Regular open-field pattern in England and Scandinavian *solskifte*', *Geografiska Annaler* 43B (1961), pp. 80–2, fig. 9.

that could easily be done by sighting between posts or by measuring off from the adjoining parcel. It was a rather rough-and-ready form of land division since it assumed that the end boundaries of the lands were straight and parallel, which they rarely were. Even so, it had the advantage of reducing the complexities of calculating area to a matter of linear measurement and allowed the work to be carried out, not by an experienced surveyor, but by anyone with a measuring rod. One of the attractions of this explanation is that it applies to all types of land, not only arable.

The corollary of reducing the complexity of partitioning an area to a simpler matter of calculating a linear measure was that the results of land division were obvious. It required no knowledge of geometry or understanding of surveying. All tenants could readily see the proportion of land they had been allotted. However, if that was a purpose, then it implies that the consent and agreement of the tenants to the land division was an important consideration. A conspicuously fair partition of land would hardly have been necessary if it had been imposed upon the community of the vill. It has been shown in Northamptonshire that the allotment did not take place in newly settled lands, but in areas that were already under cultivation, and the same may well have been true in Yorkshire. Certainly, there was settlement on the Wolds, at Wharram Percy, before the fields were laid out, in or after the tenth century. Even in the marshlands, the land divided up had been used for pasture. Tenants gave up their year-round right to common grazing and received instead holdings in severalty and more limited rights of pasture. In all these areas, the process of laying out long lands required that tenants pooled their rights in the vill so that it could be parcelled out anew.³⁰

Two other features common to the areas examined might tend to support these explanations. The first is the use of the tenurial cycle. There was no agricultural reason for this mechanistic system of land allotment, except that in its arbitrariness it created a pattern that was fair to all. By systematically allotting lands and spacing out any individual's holdings, everyone stood an equal chance of obtaining a share of the better and the poorer soils. The second feature is the recurrence of the words *dál* and *deill* in the field-names and in local terminology. These names are found in all areas where there were long lands and they served to assert that lands were shares or a portion taken out of a common whole. This was a simple statement of fact in the marshes, where common pasture was divided up amongst tenants, but it may had a greater significance in Yorkshire and Northamptonshire. The settlement system before the ninth or tenth century in both those areas comprised individual farmsteads or hamlets whose occupants appear to have cultivated the immediately surrounding land. The creation of townships and common fields required all the land to be brought together and then divided up. The description of the land as *dálland* was, therefore, a statement about its new character in contrast to the former situation.³¹

³⁰ G. Milne and J. D. Richards, *Wharram: a study of settlement on the Yorkshire Wolds*, VII: *two Anglo-Saxon buildings and associated finds*, pp. 90–3; Stamper and Croft, *Wharram: South Manor area*, pp. 196–8; Gardiner, 'Transformation of marshlands', pp. 39–42.

³¹ Parry, *Raunds area survey*, 92–6; T. Brown and G. Foard, 'The Saxon landscape: a regional perspective', in P. Everson and T. Williamson (eds), *The archaeology of landscape: studies presented to Christopher Taylor* (1998), pp. 80–1.

The interpretation offered here points towards the agricultural community as the initiator of change. Historians have sometimes assumed that any substantial change, especially one that required co-ordinated action, must have been agreed and organized by the lord or his officials. For example, Harvey considered that large-scale land division in Yorkshire was the result of seigniorial action. However, the particular character of eastern England before and immediately after the Conquest throws doubt upon this view. Lincolnshire and Yorkshire were weakly manorialized and were occupied by substantial communities of free sokemen. Domesday Book provides an imperfect record of the situation in Lincolnshire, because the nature of the record required it to force the peculiar form of land tenure into the Procrustean bed of the manor.³² Nevertheless, strong lordship seems to have been largely absent and decisions about the organization of land were mostly likely to have been made by either the hundred or the community of the vill. The Lincolnshire hundred not only had responsibility for collecting the geld and keeping the peace, but also had interest in agricultural matters. Both Douglas and Stenton have pointed to the agreements made by hundreds, in Lincolnshire, and leets, the equivalent bodies in Norfolk, to divide up or maintain areas of common marsh. However, Hallam has argued that the division of marsh between hundreds was just the first process of the parcelling out of land. The land given to a vill was then divided amongst its tenants, which was the stage at which it would have been divided into dales. Even as late as the first half of the thirteenth century, the community of the vill had a continuing role as the body responsible for the division of marshland.³³ We should perhaps look to similar bodies of sokemen for the creation of long lands in Northamptonshire and Yorkshire.

IV

Agricultural historians have been reluctant to accept the findings of Hall and Harvey in Northamptonshire and Yorkshire, and their work has largely been set to one side rather than incorporated into a wider understanding of the development of open fields. Large-scale re-organization of landscape did not readily fit with the understanding of agrarian communities in the ninth to eleventh centuries. However, since their studies were published, other evidence has emerged of the ability of communities elsewhere to lay out fields on a very large scale, and the discoveries in Northamptonshire and Yorkshire no longer seem quite so extraordinary.³⁴ Furthermore, the identification here of similar long lands in the east coast marshes suggests that this field type is not a local peculiarity. The main problem now is to determine the chronology of change, because the arguments for date are largely circumstantial. The dating evidence from the east coast marshes is better than most other areas, partly because the events took place later,

³² Harvey, 'Planned field systems', p. 96; Roffe, 'The Lincolnshire hundred', *Landscape Hist.* 3 (1981), p. 33; D. Roffe, 'Domesday Book and northern society: a reassessment', *English Hist. Rev.* 105 (1990), pp. 328–9.

³³ D. C. Douglas, *The social structure of medieval East Anglia* (1927), pp. 196–8, 250–2; Stenton; *Danelaw*, pp. lxxviii–lxxix. For dating of the last to 1229–36, see

Hallam, *Settlement and society*, p. 31; *ibid.*, pp. 29, 33–4.

³⁴ S. Oosthuizen, *Landscapes decoded: the origins and development of Cambridgeshire's medieval fields* (2006), pp. 95–107, 146–8; D. Chatwin and M. Gardiner, 'Re-thinking the early medieval settlement of woodlands: evidence from the western Sussex Weald', *Landscape Hist.* 27 (2006), pp. 31–49.

but also because there are many early records and a reasonably well-dated pottery sequence to assist in an interpretation of the archaeology. Yet even in that region it is difficult to date with any precision the construction of embankments and their associated fields established before the twelfth century. The chronological imprecision has also led to uncertainty about the processes by which the long lands might have emerged. In the marshes it is possible, of course, to trace the development from common pasture to divided land, which took place as blocks of wetland were used more intensively. The situation in the Northamptonshire and Yorkshire townships was rather different and there may have been a number of phases as the system developed but, if that was the case, the various stages cannot yet be distinguished. All we see in the pattern of fields is the final result of such changes and, consequently, there is a tendency to assume a single phase of re-planning. Furthermore, archaeologists have tended to link the nucleation of settlement to the formation of these open fields with long lands. It is by no means certain, however, that the two occurred simultaneously and they may have been separated by a century or more.³⁵

It has been argued here that the landscapes in the three areas examined, although very different in their mature form, were the result of a common attitude to land division. The practical need to divide up land amongst the community in a fair and transparent manner, but without the use of complex mathematics or surveying, led to a particular approach. Long strips were laid out across areas of the township so that it was manifestly equitable. It is possible that the character of the communities of free peasants in this area of eastern England may have been responsible for this method of parcelling out land. On the other hand, future analysis of field patterns could yet show that long lands were once a widespread feature of early land division.

³⁵ Brown and Foard, 'Saxon landscape', pp. 80–1.