

CONCLUSION

Records are sketchy: such as they are, they show a steady attrition of ledger slabs over the centuries, particularly during major move-
rounds such as the clearing of the nave in 1787. And with the massive
tourist traffic round the cathedral many of the surviving ledger slabs
are steadily being worn away. The following are the major risks:

- a. Choir, Trinity Chapel, etc.; also Chapter House. None.
- b. Crypt. The group of indents in the south-west corner, the
supposed Prior Molash and his parents, are in the main gangway and
seriously at risk.
- c. South-west Transept. There are still two good ledger slabs
seriously exposed, Aucher 1700 and Holcombe 1725, to the north of
the shop counter.
- d. North-west Transept (Martyrdom). This probably contains the
most important slabs and indents, and at the same time is the busiest
part of the cathedral. Some sort of fairly radical protective action
seems to be called for; perhaps, for instance, a false floor. As a
separate issue there is a single ledger slab (Jeffreys 1689) in the
middle of the passage to the crypt which seems to be almost wantonly
exposed.
- e. Nave. The ledger slabs down the side aisles are covered and
protected by chairs; but it is not clear whether perhaps the chair feet
themselves damage the slabs.
- f. Cloisters. All the cloisters are subject to heavy wear and many
good ledger slabs and brass indents are being worn away.

KENTISH LAND MEASUREMENTS OF THE
THIRTEENTH CENTURY

K.P. WITNEY

A good deal of confusion still surrounds the measurements of land
area used in thirteenth-century Kent. Whereas linear measurements,
and those of weight or capacity, had by then become standardised
throughout England, and mostly survive today, if only in specialised
uses, there are few medieval superficial measurements (other than
the acre) that have not been superseded. Many of them were peculiar
to Kent; identical terms might be applied in different ways depending
upon the context; and the very concepts on which they were based
have become alien. While some features of the Kentish system have
been well studied, the finer details tend to have been passed over and
the whole needs bringing together. The purpose of this article is to
elucidate these measurements. The evidence we use is drawn mainly
from the survey undertaken by Archbishop Pecham in 1284/5 of the
customs and land-holdings of all his manors,¹ of which there were 17
in Kent alone, among the very largest in the county and scattered
through every part of it.

Superficial measurements were of two kinds. First, there were
measurements of actual land area, from the acre downwards, used to
survey individual fields and holdings. Most of these derived originally
from the strip system of cultivation in large open fields, such as was
prevalent over much of England, and they were less easily adapted to
the disorderly patchwork fabric of the Kentish countryside. Second,
transcending these, there were much larger units, used for distribu-
ting land tax and manorial dues and services. These were supposedly
of a specified uniform acreage, and treated accordingly, but, in fact,
they varied considerably in size between each other. The principle
was the same throughout England, but the Kentish units were unique
both in size and conception.

¹ Cant. MS E24.

MEASUREMENTS OF ACTUAL AREA

The prime implement of land measurement in Anglo-Saxon times was the *gyrd*, or yard-stick, cut from coppice or straight saplings. This was not the three-foot yard that we know today, which was first introduced in Henry I's reign, largely as a measure of cloth.² To begin with it differed in length in different parts of the country, but it usually approximated to 16 ft., long enough to be serviceable but not so long as to be difficult to handle; and in Richard I's reign it became standardised as the rod, pole or perch of 16½ ft. still surviving today.³ In thirteenth-century manorial surveys the foot* and the perch had become the prime units of linear measurement. The vernacular 'yard' had changed in value and been abandoned to other purposes, leaving only a few traces of its previous use; but the Latin form of it, *virgate*, had been retained in its original sense, i.e. connoting the old *gyrd* of around 16 ft. We occasionally find it used as a linear measurement instead of perch; for instance, in Bishopsbourne manor for allotting responsibilities among cottars for erecting fences around the lord's corn,⁴ and at Sturry for apportioning stretches of wall around the manorial court to be maintained by different groups of tenants.⁵ But much its most important use was as a component in defining land areas.

It is customary today to describe superficial measurements in terms of the square – the square foot, square mile and so on – but in the thirteenth century there was only one measurement of that kind in Kent, the square perch, statutorily defined in the Assize of Measures of 1196⁶ and existing today at its earlier value, i.e. the square of 16½ ft. (or 30¼ yds. sq. in modern terms). It features frequently in the archbishop's manorial surveys as the smallest unit of land worthy of designation. But, with one other exception, to which we shall come, superficial measurements were conceived in the Middle Ages in a quite different way, not as squares of any specific length but as strips of land of varying widths but all notionally a furlong (i.e. a 'furrow-length') long; this being reckoned at 40 *gyrds* – 220 yds. in present terms – the distance it was supposed that a plough-team could cover without pause, unless previously turned. The working of this system

* Reckoned as 12 in., then as now.

² Grierson, 1972, 17.

³ *Ibid.*, 21–2.

⁴ Cant. MS E24, fol. 68v. Each cotland had to enclose four *virgates* 'around' the lord's corn.

⁵ Black Book, i, 136–38.

⁶ Grierson, 1972, 4.

was expounded by Maitland nearly a hundred years ago,⁷ who instanced as a prime example that of the acre, which was originally conceived as a furlong strip four *gyrds* in width. This apparently was considered to be the amount of land with which a team might be expected to cope in the course of a day, though in practice that varied with soil and terrain and seems often to have been less: at Lyminge, for example, a team was expected to plough in a day only three-quarters of an acre of the archbishop's demesne.⁸

It was in this context that the term *virgate* had been substituted for *gyrd*. A single *gyrd*'s width, or 16½ ft. of furrow, being 220 yds. long (in present terms), was regularly described in thirteenth-century Kentish records as a *virgate*. This, in fact, was a quarter of an acre; and quite often we find the vernacular synonym *rod* (now rood) being used for the same dimension.⁹

Much more unexpected is the term 'foot', employed not as a linear measure, but as a measurement of area. This was not a square foot, or anything like it. In Gillingham manor it was defined as a fifteenth of a *virgate*,¹⁰ whereas, e.g. at Wingham, it was apparently reckoned as a sixteenth,¹¹ or around 75 yds. sq. in modern usage. The calculation is most clearly illustrated at Bishopsbourne. In this manor, we are told, there were just over 26¼ *yokes* (groups of tenancies) each of which had to plough 50 'feet' of demesne, the total amount ploughed being summed up later in the survey as just under 21 acres.¹² This again works out at around 75 yds. sq. (modern) to a 'foot' (medieval). The explanation appears to be that a superficial 'foot' was notionally the area of land that would have been contained in a strip 1 ft. wide and a furlong in length, the foot being treated as a proportion of the old *gyrd* of around 16 ft. In certain manors, like Gillingham, the *gyrd* was apparently still reckoned by persistent local custom as a little shorter than its later standardisation at 16½ ft. in the linear perch. Although as a measurement of area the 'foot' (even

⁷ Maitland, 1897, 371–73.

⁸ Cant. MS E24, fol. 65. 'they say also that each joint plough must plough 2 acres, 1 *virgate* over 3 days, that is 3 *virgates* a day'.

⁹ *Ibid.* fol. 9–9v. In the hamlet of Woolage (Wingham manor) individual holdings containing 233 acres, 8½ *virgates* were finally summed up as amounting to 234 acres and 6 *rods*.

¹⁰ *Ibid.*, fol. 31. 'They have to reap from the day of St. Peter ad Vincula on any Monday, Wednesday and Friday until the end of August half an acre of winter barley, or one *virgate* of barley by the measure of 15 feet to one *virgate*, unless any festival prevents it, or rain'.

¹¹ *Ibid.*, fol. 1. 'William of Appleton holds from the land of Gilbert and Roger Cooper 17 acres, 6 feet; Simpson and Roger of Rusham hold 5 acres, 3 *virgates*, 10 feet. From this 23 acres they provide three men for boon-work', etc.

¹² *Ibid.*, fols. 68v–69.

more than the others) can have corresponded to no conceivable lay-out of the actual plots of land, it served as a useful fraction of *virgate* in sizing individual fields or holdings; and the term was apt by the logic of the time.

Closely associated with the 'foot' was a unit called the *suclus*, a term deriving from the Anglo-Saxon *sulh*, a plough. It was used on only two of the archbishop's Kentish manors, Maidstone and Wrotham, and then only occasionally in defining the amount of demesne land that a tenant was required to plough. That was related to the size of his holding, so that, by comparing the various entries, a scale of measurement can be built up into which the *suclus* can be fitted. At Maidstone it appears to have had a value approximating to that of the 'foot', though if anything a little larger.¹³ For Wrotham we can be more specific. On this manor the ploughing requirements were normally expressed in 'feet', at the rate of one 'foot' to be ploughed for every acre that the tenant owned; and on the few occasions when the term *suclus* was substituted for 'foot' the rate was the same.¹⁴ It seems that the underlying conception was of an area of land a furlong in length and corresponding in width to a single furrow, that being equated for comparative purposes with a foot of 12 in.

Finally, there was one other superficial measurement, the *daywork*, the origin of which is the most obscure of all. The difficulty is to divine what form of a day's work it was supposed to represent. Jolliffe thought it was that of the plough¹⁵ but, whatever it may have stood for in other counties, in Kent it persistently features as a much smaller area, less than a *virgate* but more than a (square) perch. Where comparison can be made with other measurements used to define the quantities of demesne to be ploughed, reaped or mown by groups of tenants it appears to equate with a tenth of a *virgate* (a fortieth of an acre)¹⁶ or, looked at another way, with four square perches.¹⁷ It seems to have been a term used in Kent purely as a useful fraction, regardless of its meaning elsewhere or its origin.

This, indeed, is the clue to most of these superficial measurements. Whatever their nomenclature, however originally derived, and how-

¹³ *Ibid.*, fol. 25-25v.

¹⁴ *Ibid.*, fol. 80. 'George of Ledes, Richard son of William, and Agnes and Cecilia daughters of Robert Smith hold 11 acres. For this they plough 11 sulcos', etc.

¹⁵ Jolliffe, 1933, 104-5.

¹⁶ Most clearly at Maidstone (Cant. MS E24. fol. 25). Here a holding of 13 acres had to plough $\frac{1}{2}$ acre of demesne and reap 15 *dayworks*; another of $6\frac{1}{2}$ acres had to plough 1 *virgate* and reap 7 $\frac{1}{2}$ *dayworks*; and third of 3 acres, 1 *virgate* had to plough $\frac{1}{2}$ *virgate* and reap 3 *virgates*. 3 square perches.

¹⁷ See also Mühlfeld, 1933, Introduction XXXV-VI.

KENTISH LAND MEASUREMENTS

ever notional, alien or outmoded the conceptions underlying them, they produced a neat and serviceable table of fractions, as follows:

1 acre		4,840 yds. sq. (modern)
1 <i>virgate</i>		
1 <i>rod</i> (rood)	$\frac{1}{4}$ ac.	1,210 yds. sq. (modern)
1 <i>daywork</i>	10th. <i>virgate</i>	121 yds. sq. (modern)
1 'foot'		
1 <i>suclus</i>	c. 16th <i>virgate</i>	c. 75 yds. sq. (modern)
1 sq. perch	$\frac{1}{4}$ <i>daywork</i>	30 $\frac{1}{4}$ yds. sq. (modern)

ACCOUNTING UNITS

The outline of the system is well known, but much less so its later developments. At the time of Domesday Book the units in use for taxation purposes over the greater part of England were those of the *hide*, nominally of 120 acres, and again the ubiquitous *virgate*, in this context supposedly of 30 acres, which was thought to approximate to the amount of 'yard land', i.e. land measured by the *gyrd*, that a peasant family might typically be expected to hold.¹⁸

The Kentish system was based upon a quite different conception, that of the 'ploughland', the *terra aratri*, or *sulung* in the vernacular. In its origin, which went back at least to the seventh century,¹⁹ it was supposed to define the land worked by an eight-ox plough, apparently including with the arable associated pastures, meadows, shaves of wood and so on.²⁰ In this county of scattered settlements it, therefore, approximated to the territory of a self-supporting hamlet, each hamlet owing similar obligations and duties as its neighbours. The actual sizes of the units must have varied from the beginning depending upon the soil and surroundings; but with the development of the administrative structure of Kent these units, too, were given a nominal acreage for accounting purposes, of which 200 acres was the prevailing standard in north-east Kent, although there are traces that elsewhere it may have been 180 or 160.²¹

While in the eighth and ninth centuries the terms *sulung* and *terra aratri* had been used interchangeably, by the time of Domesday Book *sulung* had become a term of art reserved to those among the 'ploughlands' which constituted privileged freeholds, or 'gavel-lands'

¹⁸ Maitland, 1897, 389 ff. But in practice the husbandmen's holdings at this time seem often to have been significantly larger: see Lennard, 1946.

¹⁹ E.g. CS 97 of A.D. 697; and Sawyer, 1968, no. 19.

²⁰ Stenton, 1971, 281-82; and Witney, 1987.

²¹ Jolliffe, 1933, 44; and Elton, 1867, 132-38.

in later parlance.²² Those amounted to about 40 per cent of the whole and were concentrated predominantly on the old settled lands of the north. The reason for the distinction was that these holdings, though owing only moderate rents and little in the way of manorial services, were alone liable, as ancient warrior lands, to the land tax still known as Danegeld, originally raised in substitution for military service. The remaining lands consisted of the lords' demesnes, which lay outside the system of assessment; the *inlands*, which were subordinate tenancies originally released from, or connected with, the demesnes and more heavily burdened with rents or services than the gavelands; and 'new lands' carved out of forest or created from reclaimed marsh, which were mostly freeholds but treated individually on terms depending upon their particular nature or circumstances.²³ Among the last were now populated Wealden dens, subject to the unique body of forest custom, pannage, *danger*, *boscum*, *lefgavel* and the rest.²⁴

During the twelfth and thirteenth centuries the rapidly accelerating growth of population, coupled with partible inheritance and a free market in land, led to a drastic grinding down of the husbandmen's holdings. It was then found convenient, throughout most of Kent, to resort to a finer accounting mesh for the gavelmen's dues and services. This was the *yoke*, a quarter of the *sulung* and appropriately named from the yoke of two oxen that went to the composition of an eight-ox plough.²⁵ Only in north-east Kent, and among the archbishop's manors only at Reculver, did the *sulung* remain in use. In this manor the *sulungs*, nominally of 200 acres, had an actual range of 200–213, with one exception (at Stourmouth) which had no more than 43½.²⁶ More typically, in the Christ Church manor of Eastry, which had seven *sulungs*, three were of 200 real acres, two of around 205, one of 220 and one (on the poorest soil) of 300.²⁷

Elsewhere, where the *yokes* had been substituted, traces of the earlier, underlying *sulungs* are often apparent. Thus, in Westgate manor four outlying *yokes* at Rushbourne in Hoath parish and four others around Swalecliffe continued to be treated together; and at Northfleet four were grouped in what was described as a *geder-suolunge*.²⁸ Normally the *yokes* in a manor were assessed at either

²² Witney, 1987.

²³ *Ibid.*

²⁴ Du Boulay, 1961

²⁵ Stenton, 1971, 281.

²⁶ Cant. MS E24. fols. 19–21.

²⁷ O'Grady, 1981, 194–200.

²⁸ Cant. MS E24. fols. 22v–24 and fol. 87v.

50 acres, as e.g. at Petham,²⁹ or 40, as e.g. at Gillingham,³⁰ and amounted, if not exactly at least closely, to four times the number of previous *sulungs*. Otford, for instance, had contained eight *sulungs* at the time of Domesday Book and later had 31½ *yokes*.³¹ But the comparison was not usually as exact as this. Moreover at both Maidstone and Lyminge, the *yokes* were rated at the curious figure of 52 acres.³² This suggests that in the course of conversion adjustments had sometimes been made, presumably to bring the nominal acreage of the new units closer to actuality or to reduce the discrepancies in size between the units. A particularly drastic reorganisation seems to have occurred at Bexley. The manor had had three *sulungs* in 1066,³³ but by 1284 these had been replaced by 16 *yokes*, some reckoned at 40 and some at 30 acres,³⁴ although there appears to have been no change in the extent of the manor.

The ancient customary obligations imposed on the gavelmen – a little ploughing, reaping and mowing (*gavelerth* and *gavelrip*), the carriage of commodities (*averagium*) and some malting, walling or roofing – were corporately imposed through the *yokes*. But of equal and increasing importance to the lords were the boon-works (*precaria*) which were originally voluntary (with food provided) but later insisted upon, particularly at harvest.³⁵ All tenants, whatever their status, were expected to contribute to these according to their resources.³⁶ Such obligations, by their nature, needed to be recorded in smaller groupings than the *yokes*. It seems to have been largely for this reason that by the thirteenth century we find the *yokes* themselves divided into quarter fractions. Whether by analogy with the quarter acre or with the quarter *hides* of other counties, the term adopted for these fractions in Kent was, once more, *virgate*. In this context, therefore, the term meant neither a quarter acre, nor 30 acres as elsewhere in England, but anything from 10 to 13 acres.

²⁹ *Ibid.*, fol. 68v.

³⁰ *Ibid.*, fol. 29v. 'the yoke of Hempstead which contains 40 acres like the others'.

³¹ *Ibid.*, fol. 74; and Kent Domesday 2:4.

³² *Ibid.*, fols. 29 and 65v.

³³ Kent Domesday, 2:6.

³⁴ Cant. MS E24. fols. 89v–92v.

³⁵ Du Boulay, 1966, 71–72.

³⁶ E.g. Cant. MS E24. fol. 66v (Lyminge). 'They say that every tenant of the said 12 yokes who has a horse must harrow for 13 days for the lord's corn whenever summoned. And he should receive one meal a day, namely barley bread, broth, one dish and cheese, and should be given tines for his harrow. They say also that every tenant of the 12 yokes having a horse and cart must carry in the lord's corn for 3 days in the autumn; and those who do not have them must come with forks to stook and lift the sheaves in the fields, receiving once a day barley bread, one dish and cheese'.

according to the assessment of the *yokes* in the particular manor. When it is recollected that *virgate* was still occasionally used as a linear measure identical with the perch the opportunities for misunderstanding need no emphasis. Moreover the process did not end there. At Teynham we find the term 'foot' defined as a sixteenth part of a *virgate*, in this sense and not that of a quarter acre,³⁷ the term (like that of *virgate* itself) having simply been transposed as a fraction from one context to another in total disregard of its origin.

There had been other developments, too. By the end of the thirteenth century the term *yoke* was no longer entirely confined to the gavel-lands, but had also, if only infrequently, been extended to 'new lands' in the Weald or on Romney Marsh which, while they were freeholds, were subject to quite different manorial customs. We can see the origins of this development among the dens belonging to Gillingham. The tenants of these, we are told, joined together to represent two *yokes* when any levy was raised for the repair of Rochester Bridge or for 'the taxation of the yokes'³⁸ the object having nothing to do with manorial dues but being merely to spread the burden of public imposts, previously confined to the gavel-lands. In Hollingbourne manor, too, certain of the dens were reckoned as *yokes* for the same purpose;³⁹ and at Aldington not only the dens but the manor's extensive holdings on Romney Marsh were commonly described as *yokes* without further explanation,⁴⁰ although the manorial customs applying to them were typically of the forest or marsh, having almost nothing in common with those of the old established *yokes* in the uplands around Aldington itself. These outlying *yokes* (so-called) had been similarly divided into *virgates*, or alternatively into what were described as *ferlings* but equally represented quarter *yokes*.⁴¹ The origin of that term is ambiguous. At first sight, it appears to be a variant of 'furlong'; but when used in this context, as an accounting unit equated with that of the *virgate*, it seems better derived from the Anglo-Saxon *feorthing*; meaning a fourth part,* i.e.

* As, until recently, in the farthing.

³⁷ *Ibid.*, fol. 38v. 'of one *virgate* in Cutewalton . . . the heirs of Joseph Stud hold half a quarter, and a quarter part of a quarter i.e. one foot'.

³⁸ *Ibid.*, fol. 33v.

³⁹ i.e. the repair of Rochester Bridge: Lambarde, 1970 edn. 346. For the dens and their identification, Witney, 1976, 243-5.

⁴⁰ Cant. MS E24, fols. 59-61.

⁴¹ *Ibid.*, fol. 60v. 'Robert at Grave, William le Guet, John of Hathelingeherst, Ralph Holstock, Thomas son of William, and Geynwing Bush for one *ferling* undertake *averagium*' (i.e., carrying duties by horse) 'for a quarter *yoke*'. Other entries here show the same relationship between the *ferling* and the *yoke*.

of a *yoke*. The term appears only infrequently, but examples comparable to those at Aldington are to be found, for instance, at Wrotham.⁴²

Finally the old *inland* tenancies associated with the demesnes had mostly been formed into their own conventional units. The humblest of these holdings, the *cotlands*, with their multitude of menial obligations, had been grouped into small units of specified acreage, typically of around 4 or 5 acres though at Shoreham of as many as 8.⁴³ In their case these acreages were more often real than nominal; but that was not so with the generality of less heavily burdened *inlands*, which were sometimes treated individually but commonly sorted into units of much the same nominal size as the *yokes*. Such, for example, were the *loghi* of Gillingham.⁴⁴ A feature of these units tended to be the extent of the carrying tasks (*averagia*) imposed upon them; and for this reason they were described in some manors as *averlands*.⁴⁵ At Wye, they were called *averyokes*, or else 'servile yokes', to distinguish them from the free *yokes* of the gavel-lands.⁴⁶ At Teynham, a manor which was unusual in containing a preponderance of *inlands* and in the number of carrying duties required of them, we are told that an inquest carried out by Elias of Dereham (the archbishop's Steward of Lands, 1197-c. 1240) found there to have been a total of 70 *yokes*, of which 43 $\frac{3}{4}$ were *averyokes*.⁴⁷ At Saltwood, we find instead numerous smaller units called *avervirgates*, these being described alternatively as *averyards*,⁴⁸ the term 'yard' having survived here in its antiquated sense as a synonym of *virgate*. The same usage had also become fossilised in certain place-names, as for example at Boughton-under-Blean.⁴⁹

⁴² *Ibid.*, fol. 76. 'Richard of Nepicar, Roys son of William, Robert Mason, the heirs of Walter Mason and John le Puke hold 13 acres for one *ferling*'. The services that follow are a quarter of those for a full *yoke* on this manor.

⁴³ *Ibid.*, fols. 69 (Petham), 69v. (Bishopsbourne) and 72 (Shoreham).

⁴⁴ *Ibid.*, fols. 31-2. The derivation of the term is obscure, but probably comes simply from the Anglo-Saxon *log(h)* a place.

⁴⁵ Black Book, i, 193-94. This was at Stodmarsh, belonging to St. Augustine's Abbey.

⁴⁶ Mühlfeld, 1933, Introduction, xxxviii-li. This belonged to Battle Abbey.

⁴⁷ Cant. MS E24, fols. 39v-40. For Elias of Dereham, see Du Boulay, 1966, App. B. 393.

⁴⁸ *Ibid.*, fols. 63-5.

⁴⁹ *Ibid.*, fol. 41. 'The heirs of John Young, Robert Pauline and their partners hold one *virgate* of land called Stevensyard'. There are a number of similar examples in this manor, and others.

The accounting units may, therefore, be summarised as follows:

<i>Sulung</i>		160–200 acres (nominal)
<i>Yoke</i>	$\frac{1}{4}$ <i>sulung</i>	40–52 acres (nominal)
<i>Virgate</i>	$\frac{1}{4}$ <i>yoke</i>	10–13 acres (nominal)
<i>Ferling</i>		
'Yard'		
'Foot'	Sixteenth of a <i>virgate</i>	c. $\frac{3}{4}$ acre (nominal)

CONCLUSION

For all the complications of these measurements it is possible to find one's way through the maze by a strict attention to the contexts in which they are used. For their understanding it is necessary to trace the development of the curious land system of medieval Kent, and important to do so in order to help in answering questions of fundamental concern to economic historians of the period. Among the chief of these questions are those that follow. How far by the close of the thirteenth century had the Kentish husbandmen's holdings been reduced, and how fragmented had they become? How great were the inequalities? What proportion of husbandmen were still capable of making a tolerable living from their land? What opportunities did they have to supplement their means by craft work or day labour on the demesnes or for their wealthier neighbours? In short, how far did this remain a truly peasant society, or one largely dependent on small entrepreneurial ventures or hired employment; and how close, for all that, was the spectre of famine?

BIBLIOGRAPHY

- Primary sources:* *Canterbury Cathedral MS E24* (Abbreviated to Cant. MS E24).
 (Ed.) W. de G. Birch, *Cartularium Saxonicum*, 3 vols., 1885–93 (CS).
 (Ed.) P. Morgan, *Domesday Book: I: Kent*, Chichester, 1983 (Kent Domesday).
 (Eds.) J.S. Turner and H.E. Salter, *Register of St. Augustine's Abbey, commonly called the Black Book*, Oxford, 1915 (Black Book).
- Secondary sources:* F.R.H. Du Boulay, 'Denns, Droving and Fanger', *Arch. Cant.*, lxxvi (1961), 87–113; *The Lordship of Canterbury*, London, 1966.
 P. Grierson, *English Linear Measures*, University of Reading, 1972.

- C.I. Elton, *The Tenures of Kent*, 1867.
 J.E.A. Jolliffe, *Pre-Feudal England: The Jutes*, Oxford, 1933.
 W. Lambard, *Perambulation of Kent*, London, 1970.
 R.V. Lennard, 'The Economic Position of the Domesday Villani', *Econ. Journ.*, lvi (1946), 179–95.
 F.W. Maitland, *Domesday Book and Beyond*, Cambridge, 1897.
 H. Mühlfeld, *A Survey of the Manor of Wye*, New York, 1933.
 M.M. O'Grady, *A Study of some of the Characteristics of the Holdings and Agriculture of Eastry, East Kent, from c. 1086–1350*, unpublished M.Phil. thesis, University of London, 1981.
 P.H. Sawyer, *Anglo-Saxon Charters: An annotated List and Bibliography*, Royal Historical Society publication, London, 1968.
 Sir F. Stenton, *Anglo-Saxon England*, 3rd edn., Oxford, 1971.
 K.P. Witney, *The Jutish Forest*, Athlone, 1976; 'The Period of Mercian Rule in Kent; and a Charter of A.D. 811', *Arch. Cant.*, civ (1987), 87–113.