

Statistics of Sheep in Medieval England

A QUESTION OF INTERPRETATION

By REGINALD LENNARD

IT has recently been maintained that computation by the 'great' or 'long' hundred of six score was "the prevailing usage in sheep-farming accounts" in medieval England and that even the numbers of sheep in the early twelfth-century surveys of the Gloucestershire manors of the Abbaye-aux-Dames ought to be interpreted in that sense.¹ Since this contention, if correct, would profoundly affect the statistics of medieval sheep-farming, an examination of evidence bearing upon the matter may be of some use.

Direct evidence from manorial accounts is not very abundant, for the method of computation they employ in this particular can only be determined with certainty if the numbers involved amount to a hundred or more, if they are expressed in 'hundreds' and not merely in scores, and if the arithmetic of addition or subtraction is both accurate and such as to show what a 'hundred' means. Thus in the well-known series of Wellingborough accounts, none of the seventeen thirteenth-century accounts provides data of the required nature for sheep and it is only when we come to the account of 1304 that we find sure proof of the sheep being reckoned by the long hundred.² There are however other sources of information—specific references to the type of hundred employed in lists of stock or grants of pasturage, the re-stocking accounts in the Pipe Rolls, and some valuations in the *Rotuli de Dominabus*—and these sources are available for the twelfth century, whereas the earliest surviving manorial accounts are those preserved in the Pipe Roll of the Bishopric of Winchester for the year 1208-9.

The sources are scattered and in many cases unpublished, and my researches among them have not gone very far; but the facts I have been able to collect seem none the less to justify some fairly definite conclusions.

1. In the first place, eastern England north of the Thames provides undoubted examples of sheep enumerated by the great hundred. In Yorkshire its use is specifically indicated in twelfth- or early thirteenth-century grants of pasturage at Raskelfe and East Bolton in the North Riding and at Bramley,

¹ See the letter from Prof. Postan in the *Times Literary Supplement*, 13 Feb. 1959.

² *Wellingborough Manorial Accounts*, ed. F. M. Page, Northants Record Soc., p. 93 (5 score and 10+45+7 score=CCLV, i.e. 295). Some of the earlier accounts show a use of the great hundred in the enumeration of pigeons and, in spite of a slight arithmetical inaccuracy, it is evident it was used for lambs in that of 1298-9.

West Bretton, and Marton in the West Riding.¹ From Lincolnshire there are similar grants relating to Snelland and Wickenby, and an account of the Crowland Abbey grange at Monklode for the year 1258-9 which demonstrably employs the six-score hundred in the enumeration of ewes and lambs.² At Ringstead in Norfolk there were, according to a twelfth-century survey, *ducentae oves per sexcies viginti* in the time of Henry I, and the same method of reckoning was apparently employed for the sheep at Brancaster in that county.³ Perhaps this was also the case at Elsworth in Cambridgeshire, where the puzzling entry *centum oves id est decies viginti* seems to require emendation by reading *sexcies* in place of *decies*.⁴ In Huntingdonshire the valuation *centum oves vel sexaginta solidi* at Hemingford strongly suggests the same conclusion, and at Wellingborough in Northamptonshire, as we have seen, the sheep were numbered in this way in 1304.⁵ At Sandon in Hertfordshire and at *Tidwoldintun* (now Heybridge) in Essex we have clear examples in the so-called Domesday of St Paul's which was compiled in 1222.⁶ There is also some reason for thinking that in the *Rotuli de Dominabus* of 1185 the great hundred was employed for the enumeration of sheep at Aynho (Northants), Hockliffe and Chalgrave (Bedfordshire), Moulsoe and Easington (Bucks.), and Tunstead and Cockley Cley (Norfolk), for at each of these places an addition or deficit of one or more 'hundred' sheep is reckoned to affect the valuation at the rate of £1 per 'hundred', and at Wiveton (Norfolk) and Staverton (Suffolk) the addition of 60 sheep is estimated to increase the value by ten shillings.⁷

2. In the part of England to which the foregoing examples belong usage was certainly not uniform. This might indeed be inferred from the very fact that it was sometimes thought necessary to indicate that a six-score hundred

¹ *Early Yorkshire Charters*, ed. Farrer and Clay, II, No. 790; IV, No. 92; III, Nos. 1289 and 1791; VII, No. 151.

² Stenton, *Danelaw Charters*, No. 229; *ibid.*, p. xlv, note 1, citing Cott. Vesp. E. xviii, fo. 124b; F. M. Page, *Estates of Crowland Abbey*, pp. 189-90 (where, in the case of lambs, 8 'hundred' + 4 score = (3 'hundred' + 72 + 8 score + 3 + 20 + 6) = 3 'hundred' and 59).

³ *Ramsey Abbey Cart.*, Rolls Series, III, pp. 266 and 261 (where *decem* must surely be an error for *centum* in the text *decem et viginti octo matres oves per sexcies viginti*).

⁴ *ibid.*, p. 248.

⁵ *ibid.*, p. 241 *et supra*.

⁶ *op. cit.*, Camden Soc., pp. 13, 53 (*cc oves per sexcies viginti and duodecies xxx oves q' faciunt cc*).

⁷ *op. cit.*, Pipe Roll Soc., pp. 30, 33, 34, 41, 44, 48, 58, and, for Wiveton and Staverton, pp. 55, 64. The 'value' is clearly the value per annum: of Tunstead we read that the custodians *additis c ovis accreverunt firmam ville de xxx*; cp. Chalgrave, p. 34. Some doubt, however, must be felt about the applicability of the Wiveton-Staverton ratio to the other cases, because the rate in the latter is ostensibly the same as that allowed in *defalta ovium* in Pipe Rolls of the same period, as to which see below.

must be understood.¹ But positive evidence is not lacking. Apart from that of the Pipe Rolls, which will be considered later, we find that at Snainton in the North Riding of Yorkshire pasture is granted *ducentis ovibus scilicet decies viginti*, that the stock at South Walsham in Norfolk includes *ter centum oves ad minus centum*, that the five-score hundred is unmistakably used for the enumeration of the sheep in an agreement about *Edolwesnasa* in Essex.² These three examples are of twelfth-century date; and in the next century one notes that the ordinary hundred was used for four classes of sheep in an account of Berkhamsted in Hertfordshire and for the *multones* (wethers) in the already cited account of Monklode in Lincolnshire, although that employs the six-score hundred for ewes and lambs.³ Later again, arithmetic reveals the ordinary hundred in accounts of Oakington and Dry Drayton in Cambridgeshire for the year 1322-3, in an account of the East Fen in Lincolnshire for 1350-1, and in one of Forncett in Norfolk for 1378.⁴

3. Outside the east of England I have not come across a single case of sheep computed by the great hundred, and, though the limited extent of my researches prevents one from attaching much weight to this fact, it has some significance in view of the evidence that I have encountered for the alternative usage. The ordinary hundred was evidently employed throughout the Winchester Pipe Roll of 1208-9, which provides arithmetical proof of this for seventeen manors in Hampshire and for Downton and Knoyle in Wiltshire, Taunton in Somerset, Harwell in Berkshire, Witney and Adderbury in Oxfordshire, Farnham in Surrey, and Wycombe in Buckinghamshire.⁵ Other thirteenth-century accounts are similarly informing in regard to Mere in Wiltshire and Banstead in Surrey, while for Acton in Middlesex proof is furnished by two charters of 1229-30, since, in describing the same *instauramentum*, one of them speaks of a hundred sheep and the other of five

¹ Note the emphatic language of the East Bolton charter: *Early Yorkshire Charters*, IV, No. 92. (*Sciendum est autem quod predictae quadringente oves per magnum centum numberabuntur.*)

² *ibid.*, I, No. 616 (1180-90); *Register of St Benet of Holme*, Norfolk Record Soc., No. 148 (1141-9); *Domesday of St Paul's*, p. 131 (apparently last half of 12th century). In the last case 13 score + 1 + 9 + 80 + 46 = *cccc quatuor minus*.

³ *Earldom of Cornwall Accounts*, 1296-7, Camden Soc., p. 25; *Estates of Crowland*, p. 190. In the Monklode case 4 'hundred' and 84 *multones* + 3 + 80 = 5 'hundred' and 67; and a deduction of 48 + 46 + 15 from this total leaves 4 'hundred' and 58. Perhaps in the manuscript a large C = 120 and a small c = 100 as Miss Page suggests in *Wellingborough Manorial Accounts*, p. xxxvii; but no distinction is shown in the printed text.

⁴ *Estates of Crowland*, pp. 251 (ewes), 258 (*multones*); *A Terrier of Fleet*, ed. N. Neilson, p. 182; F. G. Davenport, *Economic Development of a Norfolk Manor*, Appendix IX, p. lix, note.

⁵ *Pipe Roll of the Bishopric of Winchester, 1208-9* (ed. under supervision of Hubert Hall), *passim*, and, for the places named, pp. 22, 75-6, 71, 16, 19, 59, 40, 34.

score.¹ In the early part of the next century the same story is told by accounts of Combe in Hampshire and Maldon in Surrey.² And, far away from these southern examples, a mid-fourteenth-century bailiff's roll of Coundon in Durham clearly employs the ordinary hundred in its statistics of *multones* and *hoggastri*; but the county of Durham should probably be regarded as belonging to the eastern region of ambiguous usage, for, though I have not seen anything which proves the use of the great hundred for sheep within its bounds, an account of Bishop Middleham (made in the same year as that of Coundon) gives the number of pigeons as CCIX *per minus centum*, which suggests that the five-score hundred could not here be taken for granted.³

4. The most comprehensive evidence comes from the Pipe Rolls. But these contain a trap for the unwary. In some of them there are numerous entries recording sums of money allowed for deficiencies in the stocking of manors. I take these to be deductions made from the *firma* or rent because the full complement of stock was lacking. But however that may be, the point which concerns the problem before us is that again and again the sum allowed in the case of sheep works out at exactly twopence a head for a whole year, if we assume that the great hundred was employed in their enumeration. It would be easy to jump to the conclusion that that was in fact the mode of reckoning. But then side by side with entries of this kind we find others for the purchase of sheep which clearly imply the use of a five-score hundred. For example the Pipe Roll of 1195 records that at Melbourne in Derbyshire 20s. was allowed for a default of a 'hundred' sheep (*pro c ovibus*) which would be twopence a head if $c=120$; but, in its account of stock purchased for the manor of Wirksworth in the same county, it tells us that 105s. 6d. was paid *pro cc et xi ovibus*, which is just sixpence a head if $c=100$, and this was the regular price allowed for the purchase of sheep at that time.⁴ The con-

¹ *Earldom of Cornwall Accounts*, p. 67; H. C. M. Lambert, *History of Banstead*, p. 315; *Early Charters of St Paul's*, Camden Soc., Nos. 299 and 300. For Banstead an account for the year 1363-4 also provides proof: *ibid.*, p. 346 (ccciixv + lvi + xxiii = ccclxxiii).

² *Documents of the English Lands of the Abbey of Bec* (Camden Soc.), pp. 155, 167-8; *Surrey Manorial Accounts* (Surrey Record Soc.), pp. 72-3.

³ *Bishop Hatfield's Survey*, Surtees Soc., pp. 223, 241.

⁴ Pipe Roll 7 R.I., p. 15. Some instructions issued to the itinerant justices in 1194 regarding the restocking of manors provide that the price of a coarse-woolled sheep (*ovis lanæ grossioris*) shall be sixpence, that of a fine-woolled sheep (*ovis crispæ*) ten pence.—Stubbs, *Select Charters*, 9th edition, p. 255. Dr Poole has pointed out that the Pipe Rolls of the next two years show that these prices were closely adhered to and that *oves crispæ* were only introduced on one manor.—*English Hist. Rev.*, April 1940, p. 285. Curiously enough the price in that case works out at 4d. a head, but no doubt this represents the excess over the coarse-woolled sheep they replaced.—Chancellor's Roll 8 R.I., p. 190. Some of the inferred prices are quite independent of the disputed 'hundred': e.g. 34 sheep bought for 17s. at Bledlow, Bucks.—Pipe Roll 7 R.I., p. 35.

tradition proves, however, to be only apparent. The allowances for 'defaults' were not calculated at twopence a head, but at the rate of two shillings for ten sheep or half that for a half-year. Thus in the same roll we find four shillings for a default of 20 sheep at Kirton in Lincolnshire and 30s. *pro c et l ovibus* at Bampton in Oxfordshire, and, in that of the preceding year, 42s. *pro cc et x ovibus* at Wirksworth, and at Somerton in Somerset a sum of 22s. 6d. for half a year *de cc et xxxv ovibus*.¹ It appears indeed that the 'hundred' of the entries about defaults, like that of purchase entries, was the ordinary hundred of five score. But the witness of the latter has still to be considered.

In a few cases the price per head is specifically stated. In the Pipe Roll of 1184-5 it is recorded that £19 10s. was paid in respect of the lands of Guy de Rochford in Essex *pro D et quater xx et v ovibus precium cuiusque viii*^{d.2} In that of 1197 we read that at Meon in Hampshire, where 2½ marks (i.e. £1 13s. 4d.) were paid *pro c ovibus*, the price was fourpence a head (*ove computata iiiid.*); and in that of 1199 a statement that 500 sheep were obtained for two Cumberland manors at a cost of £25 is followed by the words *scilicet pro ove xii d.*³ These were unusual prices for their dates, and perhaps that is why the explanatory note was added. Without such aids, however, the use of the ordinary hundred is clearly revealed in an overwhelming majority of cases by the fact that the total sum, divided by the number of sheep, yields a definite and acceptable quotient if they are so reckoned and does not do so if the figures are interpreted by the long hundred. The evidence is conveniently assembled in Dr A. L. Poole's article on Live Stock Prices in the Twelfth Century, which was published in 1940 and tabulates for the chief classes of stock all the prices that can be inferred from the Pipe Rolls from 1163 to 1199.⁴ For sheep, Dr Poole gives 168 examples and only in seven of them did he judge that the long hundred was employed. These were in Northumberland (at Ellingham and on the land of William de Vesci), in Nottinghamshire (at Worksop and Gringley), in Suffolk (at Orford), in Cambridgeshire (at Balsham), and on some lands of Ralph de Caugi, the location of which is not clear.⁵ Apart from the uncertainty attaching to the last case, these examples conform to the pattern of usage suggested by the evidence previously examined and only increase the area in which

¹ *Ibid.*, p. 28; Pipe Roll 6 R.I., pp. 80, 184. The Wirksworth deficit corresponds almost exactly with the purchase noted above as made the next year.

² Pipe Roll 31 H.II., p. 43. Round pointed out in 1913 that this entry shows that these sheep "were reckoned by the short hundred."—*Rotuli de Dominabus*, Introduction, p. xxxiii.

³ Pipe Roll 9 R.I., p. 17; 1 John, p. 120. ⁴ *op. cit.*, pp. 286-94.

⁵ Pipe Rolls 17 H.II., pp. 4, 116; 30 H.II., pp. 100, 155; 31 H.II., p. 10; 34 H.II., p. 5.

that showed that the long hundred was sometimes employed by adding instances from Northumberland and Nottinghamshire. Moreover the fact that local usage was thus followed in the Pipe Rolls enhances the value of their evidence, for it makes it impossible to argue that they only reflect the practice of the Exchequer. And the range of their witness is remarkable. The roll for the year 1195 especially deserves examination as it contains an exceptional amount of relevant material, and for the purpose of the present inquiry it is necessary to go into some matters of detail that are not dealt with in Dr Poole's article. Of the 60 purchases of sheep which it records, 42 were for numbers expressed in figures that include either the numeral C or, in two cases, D. On the assumption that C=100 and D=500 all the 60 cases work out at exactly sixpence a head. It is true that 24 of them would also yield a quotient in whole pence if interpreted by the long hundred. But the price would then be fivepence a head and that cannot be regarded as an admissible figure. The roll supplies no unequivocal example of it, whereas a price of sixpence is unequivocally revealed in 38 cases and is moreover the price named for coarse-woolled sheep in the instructions to the justices.¹ It seems indeed certain that the ordinary hundred was employed throughout this roll. And its witness takes us into nineteen counties—those of Derby, Nottingham, Warwick, Oxford, Buckingham, Bedford, Norfolk, Essex, Middlesex, Kent, Surrey, Hampshire, Berkshire, Wiltshire, Gloucestershire, Somerset, Dorset, Devon, and Cornwall. Moreover this list can be extended on the evidence of other twelfth-century rolls which contain indisputable examples of sheep reckoned by the short hundred in Northumberland, Cumberland, Hertfordshire, Huntingdonshire, and Sussex, and others that should probably be interpreted as such from Yorkshire, Leicestershire, and Northamptonshire.²

5. I have failed to find any evidence at all for seven western counties—those of Westmorland, Lancaster, Chester, Shropshire, Stafford, Worcester, and Hereford. But for the rest of England it is possible to summarize the results of the foregoing inquiry. It has shown that the six-score hundred was

¹ In all the twelfth-century Pipe Rolls there appear to be only three clear cases of sheep bought at fivepence a head. These were at Eaton Bray (Bedfordshire) in 1185, Edlesborough (Bucks.) in 1186, and Gomshall (Surrey) in 1193.

² The cases here classed as probable are among those which work out at sixpence a head if C=100 and at fivepence if C=120, but one can hardly regard them as certainly employing the five-score hundred because they are anterior to the instructions of 1194, and, in the years to which they belong, the sixpenny price was not so well established as it had become by 1195. Dr Poole, however, interpreted them by the ordinary hundred, and probably he was right. Only three cases are involved—Tickhill, Yorkshire; Frisby on the Wreak, Leicestershire; and Sulby, Northants: see Pipe Rolls 12 H.II., p. 50; 32 H.II., p. 134; 6 R.I., p. 27.

sometimes used for the enumeration of sheep in thirteen counties, while a warning that the ordinary hundred could not be taken for granted in the county of Durham may perhaps justify its addition to the list. If Durham is included, a clear geographical pattern is revealed. The fourteen counties form a single block, each being contiguous to one or more of the others. They include every eastern seaboard county from the Tweed to the Thames, and, of those that lie inland, Nottinghamshire and Northamptonshire are the most western. On the other hand, a use of the ordinary hundred in sheep statistics has been discerned in 25 counties, or, if the 'probable' examples are admitted, in 28.¹ These include all the counties south of Thames and they also include every one of the above-mentioned fourteen counties with the exception of Suffolk. There is thus no justification whatever for the view that the long hundred was "the prevailing usage in sheep-farming accounts." In eastern England north of Thames both modes of reckoning were employed and the statistician may well feel some doubt which to assume when he is faced by a bare statement about 'hundreds'. But in the rest of the country (apart from those seven western counties for which I can offer no evidence) he ought to regard a 'hundred' as meaning five score 'unless the contrary appears'. And, so far as my investigations have gone, it does not appear.

¹ Besides the 24 (or 27) counties mentioned in paragraph 4, these figures include Lincolnshire (East Fen and the Monklode *multones*) cited in paragraph 2 above.

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