

The 1357 Wool-Price Schedule and the Decline of Yorkshire Wool Values

by JOHN MUNRO

BEFORE SUBMITTING my revised article on the nine medieval English wool-price schedules to *Textile History* in March 1978, I had been able to verify the price listings of all but one of them: the May 1357 parliamentary schedule originally published as a royal 'Writ to the Sheriffs' or proclamation in the *Calendar of Letter Books of the City of London: Letter Book G, ca. 1352-1374*, ed. Reginald R. Sharpe (London, 1905), p. 87.¹ Since no one had challenged the accuracy of this printed document in the following 73 years, I certainly had no reason for not accepting it. But, during the next of my infrequent visits to England, in September 1978, I decided that I ought to verify the 1357 prices from the original manuscript, before proceeding with any further statistical analyses. When I asked to consult the MS of Letter Book G for this purpose at the Corporation of London Record Office (*not* the Guildhall Manuscripts Library, as Sharpe's title page suggests), the archivist politely replied: 'Certainly you may consult it; but you are wasting your time, because Dr Sharpe never made errors in editing the Letter Books.' Regrettably, however, Dr Sharpe did make an error in this instance, and a serious one: he attributed the price of 9 $\frac{1}{2}$ marks for wools of 'Elmet, Burghshire, Ripshire, Walde, and Ridale' to Leicestershire rather than to Yorkshire. The error is an understandable one: folio lx *verso* ends with 'Leycestr[shire] . . . ix marc demi'; and folio lxi *recto*, col. 1, commences with 'Elmet, Burghshire, . . .' etc., also 'ix marc demi'. After these five districts, the MS then lists 'Holdernesse, Craven, Spaldyngmore, Clyveland, Blakhoumore, Richemondshire' at 'vi marc', with 'Eboracum' (Yorkshire) in the left margin opposite the first entry, 'Holdernesse'. But a very faint marginal arrow indicates that 'Eboracum' applies as well to the first five place names, which are all indisputably districts in Yorkshire.²

During my brief London sojourn, I also located, in the Public Record Office, another copy of this May 1357 proclamation on wool prices: Chancery, Patent Rolls Supplementary, Appointments of the Staple Mayors, 27-50 Ed. III, C67/22, m. 14.³ In this document the marginal notation 'Eboracum' much more clearly applies to both sets of Yorkshire place-names, here grouped more closely together, but after 'Lancaster'. Except for this minor difference in the ordering of counties, the two documents are identical; and they confirm that all the other prices given in Dr Sharpe's 1905 publication are indeed correct for the 1357 schedule.

Since Leicestershire's wools were priced the same as those from the five Yorkshire districts wrongly attributed to Leicestershire, Dr Sharpe's one error was to present only a single wool price for all of Yorkshire: 6 marks or £4 a sack (for the second set of districts). Consequently Dr Sharpe's edition of the 1357 schedule erroneously suggested that the price of better quality Yorkshire wools, set at £6 a sack in the 1337 list, had

fallen by £2 or one third in just 20 years. That sudden drop was certainly an anomaly. For of the 34 other, non-Yorkshire wools appearing in both the 1337 and 1357 lists, 24 were priced at least half a mark (= 6s 8d) higher in the latter list, 7 the same, and only 3 less, by just half a mark. In fact, both the better and lesser quality Yorkshire wools were priced half a mark higher in the 1357 schedule: 5.6 per cent and 9.1 per cent more, respectively.

As Tables 1 and 2 suggest, the 'decline and fall' of Yorkshire wools, which I had prematurely dated from the mid-fourteenth century, evidently did not occur until much later, possibly not until the early fifteenth century. Thus in both the 1337 and 1357 schedules, the best Yorkshire wools tied for sixth place, at about 20 per cent above the mean English price; and even if these wools were priced 35-40 per cent less than the best Yorkshire wools in the 1294 Exchequer schedule, their relative value or ranking was in fact slightly better. In striking contrast are the values assigned such wools in the 1454 wool-price schedule: in the bottom half, well below the mean value. The price of Lindrick wools in particular had fallen by two-thirds from that listed in the 1294 schedule.

TABLE I. PRICES AND RANKINGS OF THE BEST AND WORST YORKSHIRE WOOLS IN THE ENGLISH WOOL-PRICE SCHEDULES OF 1294, 1337, 1357, AND 1454

| Year of List | Origin of Yorkshire Wools | Price per Sack in £ | Mean English Price in £ | Yorks. Price as % of Mean | Ranking A* | Ranking B* |
|--|---|---------------------|-------------------------|---------------------------|------------|------------|
| <i>A. Best Quality Yorkshire Wools</i> | | | | | | |
| 1294 | Fountains Abbey in Lindrick (Cist) | 10.000 | 8.851 | 113.0% | — | 38/125 |
| 1337 | Yorkshire except Craven | 6.000 | 5.053 | 118.7% | 6/36 | 7/38 |
| 1357 | Elmet, Burghshire, Riponshire, etc. | 6.333 | 5.273 | 120.1% | 6/39 | 6/39 |
| 1454 | Yorkshire Wolds | 4.000 | 4.613 | 86.7% | 17/32 | 29/51 |
| 1454 | Elment and Lindrick | 3.333 | 4.613 | 72.3% | 25/32 | 41/51 |
| <i>B. Inferior Quality Yorkshire Wools</i> | | | | | | |
| 1294 | Wykeham (Cist) and Whitby (Ben) Abbeys in Cleveland-Moors | 6.000 | 8.851 | 67.8% | — | 111/125 |
| 1294 | Bolton in Craven (Aug) | 7.000 | 8.851 | 79.1% | — | 93/125 |
| 1337 | Craven | 3.667 | 5.053 | 72.6% | 32/36 | 33/38 |
| 1357 | Craven, Holderness, Richmond, Cleveland | 4.000 | 5.273 | 75.9% | 29/39 | 29/39 |
| 1454 | Yorkshire except Wolds, Elmet, and Lindrick | 3.000 | 4.613 | 65.0% | 29/32 | 46/51 |

* Ranking A = of wools common to two or more schedules; Ranking B = of total wools listed in the schedule.

The lesser quality Yorkshire wools, however, did not experience such a *relative* decline (though their price fell 50 per cent from 1294 to 1454). For they ranked near the bottom in *all* four schedules. Indeed in the 1454 and 1337 schedules, they were priced just above the very cheapest English wools. In both the 1337 and 1357 schedules the very cheapest, most inferior wools came from the four northernmost counties: Westmorland, Durham, Cumberland, and Northumberland. Subsequently these wools proved to be too cheap to 'bere the charges and costes of our staple of Caleis', established in 1363. Finally Parliament agreed, in 1423, to exempt these northern wools from the Staple requirements; and consequently they were not included in the parliamentary edict on minimum wool-export prices of 1454.⁴

Since the northernmost districts of Yorkshire's West and North Ridings border upon Westmorland and Durham, respectively, one would expect the cheaper wools of this, the largest English county, to be found in such regions. Indeed, in 1463 Parliament extended the Calais Staple exemption to include North Riding wools from Richmond, on River Swale (see A.6 below), and Northallerton, 15 miles SW and 14 miles SE of Darlington, Durham, respectively.⁵ Conversely, one would expect to find the better quality Yorkshire wools in those southern districts of East and West Ridings bordering upon Lindsey, Lincolnshire, which had produced some of the best English wools, ranking third in the 1337 and 1357 schedules and fourth in the 1454 schedule, as shown in Table 2. But the two sets of Yorkshire wools priced in the 1357 schedule do not entirely correspond to that expected geographic pattern, as the following tabulation and descriptions indicate:⁶

A. *Cheaper Yorkshire Wools, Priced at 6 marks in 1357*

1. *Holderness* (wapentake): low-lying marshy peninsula in the southern part of East Riding, running SE, between the North Sea and the Humber estuary, from the Yorkshire Wolds to Spurn Head (see B.4 below), north of Lindsey, Lincs.
2. *Craven*: hill district with extensive moorlands in the Pennines of central West Riding, East Staincliffe Wapentake, near Skipton on River Aire, bounded by Rivers Wharfe in the north, Ribble in the west, and Washburn in the east (flowing into R. Wharfe at Otley).
3. *Spaldingmoor*: lowland district in south-central East Riding, in Harthill Wapentake, east of the southern portion of River Derwent, to the west of the Yorkshire Wolds (see B.4.6 below). The chief village is Holme-on-Spaldingmoor, 5.5 miles SW of Market Weighton.
4. *Cleveland*: highland district in Langbargh Wapentake of North Riding, 28 miles by 15 miles, running from Yarm on the River Tees, bordering on Durham, to Whitby and Redcar on the North Sea. It consists chiefly of the Cleveland Hills.
5. *Black Moor or Blackmoor*: field names in (a) the parish of Harewood, Skyrack Wapentake, 8 miles N of Leeds, just south of River Wharfe, in the lowlands Elmet district of West Riding (see B.1 below); (b) in the upper valley of River Calder, affluent of River Aire, near Halifax, in Morley Wapentake of West Riding; (c) in Wetherby rural district, on River Wharfe, highlands 12 miles NE of Leeds in West Riding.
6. *Richmondshire*: Honour in northern North Riding, in Hang and Gilling Wapentakes, a highlands district centred on Richmond, on River Swale, 15 miles SW of Darlington, Durham.

B. *Better Quality Yorkshire Wools, Priced at 9 ½ marks in 1357*

1. *Elmet*: 'obsolete regional name used in medieval times to describe the district in the west of Barkston Ash Wapentake and the east of Skyrack Wapentake', a lowlands district east of the Pennines, between Rivers Wharfe and Aire, in central West Riding. The principal market-town in Sherburn-in-Elmet, 10.25 miles SW of York and 10 miles E of Leeds.

2. *Burghshire*: westerly part of Upper Claro Wapentake in West Riding; an extensive hilly moorlands running west of River Washburn and north to north-west of River Wharfe from their junction at Otley to the Craven hills at Middleton, near Skipton (see A.2 above).

3. *Riponshire, or Liberty of Ripon*: a chiefly highlands district in Lower Division of Claro Wapentake, in the north-east of West Riding, bounded by the Rivers Ure, in the north and east, and Nidd and Washburn in the west, centred upon the town of Ripon, which is 29.75 miles N of Leeds and 13.75 miles S of Northallerton (see above).

4. 'Walde' in the 1357 MSS may refer to one of the following Yorkshire place-names: (a) *Walden Moor* with the village of Burton cum Walden, a highlands district in Hang West Wapentake, North Riding, 3 miles S of Aysgarth, in the valley of Walden Dale, through which flows Walden Beck north into River Ure, just east of Aysgarth; (b) *Yorkshire Wolds*, a 'high tract of chalk hills which extends in crescent form from the Humber near Wauldby and Cave to the North Sea at Flamborough Head', NE Holderness (see A.1 above) in East Riding. Sometimes Latinised as *Waldas* or *Waldo*, the Wolds district appears in both the 1454 and ca. 1475 wool-price schedules; (c) *Walden*, a field-name near Barnoldswick, 9.25 miles SW of Skipton, in the Craven hill district of East Staincliffe Wapentake, central West Riding, between Rivers Ribble and Aire (see A.2).

5. *Ryedale*: a wapentake in north-central North Riding, chiefly a highlands district in the valley of River Rye, which rises in the eastern Cleveland Hills (A.4 above), near Osmotherley, 6 miles ENE of Northallerton, and flows SE into River Derwent, NW of new Malton.

In the next wool-price schedule, of 1454, the highest priced Yorkshire wools came from the Yorkshire Wolds, at £4 a sack; the next best, at £3.6s.8d. a sack, 17 per cent less, from Sherburn-in-Elmet and Lindrick. The locations of the first two place-names, in the East and West Ridings respectively, have already been discussed in B.4.b. and B.1 above. *Lindrick* is a mixed highlands-lowlands district in Lower Division Claro Wapentake of north-east West Riding, bounded by Rivers Skell (10 miles long) and Laver (8 miles), which flow roughly parallel east into River Ure near Ripon (see B.3 above). Located in this district was the famous Fountains Abbey (Cistercian), which had produced by far the best quality Yorkshire wools, and one of the better English wools, listed in all three of the earliest schedules: Douai (ca. 1270), Exchequer (1294), and Pegolotti (ca. 1280-1320).⁷

Even if some districts in Yorkshire continued to produce better wools than others, during the later Middle Ages, neither north vs. south geographic location nor highlands vs. lowlands terrain provides a very good guide to relative wool qualities in Yorkshire. Thus, of the six cheaper wools in section A above, three came from southern

TABLE 2. PRICES OF ENGLISH WOOLS IN POUNDS STERLING PER SACK AND PRICE-RANKINGS IN THE SCHEDULES OF 1337, 1343, 1357, AND 1454

| County or District | Prices per Sack in the Schedules of | | | | Rankings in Schedules | | | |
|--|-------------------------------------|-----------|---|------------------------------|-----------------------|----|------------|-----------|
| | 1337 A | 1357 B | 1454 C | 1343 D | A | B | C | D |
| Herefordshire | 8.000 | 8.333 | 13.000 ^a 9.333 ^b 5.333 ^c | 8.000 6.667 ^{cc} | 1 | 1 | 1 (2) | 5 (17) |
| Shropshire | 7.000 | 7.333 | 9.333 5.000 ^d | 9.333 | 2 | 2 | 2 | 1 |
| Lincolnshire, except Holland | 6.667 | 7.000 | 5.667 ^e 5.333 ^f 5.000 ^g | 9.333 7.333 ^{cc} | 3 | 3 | 4 | 1 |
| Gloucestershire (Cotswolds) | 6.333 | 6.667 | 8.333 ⁱ 5.333 ^j 5.000 ^k | 8.000 7.333 ^{cc} | 4 | 4 | 3 (5) | 5 (8) |
| Worcestershire, except Halfshire and Dodingtre | 6.333 | 6.667 | [8.333 ⁱ] 4.000 | 7.000 | 4 | 4 | (3) 17 | 14 |
| Oxfordshire | 6.000 | 6.333 | [8.333 ⁱ] 4.667 | 8.667 6.667 ^{dd} | 6 | 6 | (3) 8 | 3 (17) |
| Leicestershire | 6.000 | 6.333 | 4.333 | 8.000 | 6 | 6 | 12 | 5 |
| Somersetshire | 6.000 | 6.333 | 4.000 | 7.333 | 6 | 6 | 17 | 8 |
| Staffordshire | 6.000 | 6.333 | 4.000 3.467 ^l | 8.667 8.000 ^{cc} | 6 | 6 | 17 | 3 (5) |
| Yorkshire: Elmet, Burghshire, Ripon- shire, Walden, Ryedale | 6.000 | 6.333 | 4.000 ^m 3.333 ⁿ 3.333 ^o | 7.333 | 6 | 6 | 17 (25) | 8 |
| Rutland | 5.000 | 6.000 | 4.333 | 6.667 | 14 | 11 | 12 | 17 |
| Northamptonshire | 5.667 | 6.000 | 4.000 | 7.333 | 11 | 11 | 17 | 8 |
| Nottinghamshire | 5.667 | 6.000 | 5.000 ^p 4.667 ^q 4.333 ^r | 7.000 | 11 | 11 | 5 | 14 |
| Buckinghamshire | 5.000 | 5.667 | 4.000 | 7.333 | 14 | 14 | 17 | 8 |
| Warwickshire | 5.333 | 5.667 | 4.333 | 7.000 | 13 | 14 | 12 | 14 |
| Lincolnshire: Holland | — | 5.333 | 5.000 ^s 4.667 ^t | 7.333 | — | 16 | 5 | 8 |
| Bedfordshire | 5.000 | 5.333 | 4.000 | 7.333 | 14 | 16 | 17 | 8 |
| Berkshire | 5.000 | 5.333 | 4.667 | 6.000 | 14 | 16 | 8 | 23 |
| Derbyshire | 5.000 | 5.333 | 3.900 3.467 ^u | 6.333 | 14 | 16 | 25 | 22 |
| Cambridgeshire | 5.000 | 5.333 | 3.333 | 6.000 | 14 | 16 | 26 | 23 |
| Huntingdonshire | 5.000 | 5.333 | 4.333 | 6.000 | 14 | 16 | 12 | 23 |
| Wiltshire | 5.000 | 5.333 | 4.667 | 5.667 | 14 | 16 | 8 | 31 |
| Hertfordshire | 5.000 | 5.333 | 4.000 | 6.667 | 14 | 16 | 17 | 17 |
| Worcestershire: Halfshire and Dodingtre | — | 5.333 | 4.000 ^v | 5.333 ^{cc} | — | 16 | 17 | 32 |

Table 2 Continued

| County or District | Prices per Sack in the Schedules of | | | | Rankings in Schedules | | | |
|--|-------------------------------------|-------------------|---------------------|---------------------|-----------------------|----|------|------|
| | 1337 A | 1357 B | 1454 C | 1343 D | A | B | C | D |
| Hampshire: | 5.000 | 5.000 | 4.667 | 6.000 | 14 | 25 | 8 | 23 |
| Isle of Wight | | | 4.000 | 5.000 | | | (17) | |
| Dorsetshire | 4.667 | 5.000 | 3.333 | 5.333 | 25 | 25 | 26 | 32 |
| Essex | 5.000 | 4.667 | 3.333 | 6.667 | 14 | 27 | 26 | 17 |
| | | | | 5.000 ^{cc} | | | | (36) |
| Middlesex: | 4.000 | 4.667 | 3.000 | 6.000 | 26 | 27 | 29 | 23 |
| London | 4.000 | — | — | 5.000 | (26) | | | (36) |
| Kent | 4.000 | 4.000 | 4.333 ^w | 6.000 | 26 | 29 | 12 | 23 |
| | | | 4.333 ^x | 5.000 ^{ee} | | | (29) | (36) |
| | | | 3.000 ^y | | | | | |
| Surrey | 4.000 | 4.000 | 5.000 ^z | 4.000 | 26 | 29 | 5 | 38 |
| | | | 3.000 ^{aa} | | | | (29) | |
| Sussex | 4.000 | 4.000 | 2.500 | 6.000 | 26 | 29 | 32 | 23 |
| | | | | 5.000 ^{cc} | | | | (36) |
| Yorkshire: Holderness, Craven, Spaldingmoor, Cleveland, Blackmoor, Richmond | 3.667 | 4.000 | 3.000 ^{bb} | 6.000 | 32 | 29 | 29 | 23 |
| Lancashire | — | 4.000 | — | 5.333 | — | 29 | — | 32 |
| Durham | 3.333 | 4.000 | — | — | 33 | 29 | — | — |
| Norfolk | 4.000 | 3.667 | — | 5.000 | 26 | 35 | — | 36 |
| Suffolk | 4.000 | 3.667 | 2.600 | 5.000 | 26 | 35 | 31 | 36 |
| Cumberland | 3.333 | 3.333 | — | 6.667 | 33 | 37 | — | 17 |
| Westmorland | 3.333 | 3.333 | — | 6.667 | 33 | 37 | — | 17 |
| Northumberland | 3.333 | 3.333 | — | 5.333 | 33 | 37 | — | 32 |
| <i>Others, Unranked</i> | | | | | | | | |
| Cheshire | 6.333 | — | — | — | | | | |
| Devon | — | — | — | 3.000 | | | | |
| Cornwall | — | — | — | 2.667 | | | | |
| Statistic | 1337 | 1357 | 1454 | 1343 | Number in Mean | | | |
| Mean of Prices Common to 1337 and 1357 lists | 5.046 | 5.305 | | | 36 | | | |
| Mean of Prices Common to 1343 and 1357 lists | | 5.307 | | 6.675 | 38 | | | |
| Mean of Prices Common to 1357 and 1454 lists | | 5.576 (5.516*) | 4.869 (4.645*) | | 33 | | | |
| | | | | | 31 | | | |

Table 2 Continued

| Statistic | 1337 | 1357 | 1454 | 1343 | Number in Mean |
|--|--------|--------|--------|--------|----------------|
| Mean of Prices Common to 1337, 1343, and 1357 lists | 5.095 | 5.343 | | 6.733 | 35 |
| Means of Total Listings | 5.053 | 5.273 | 4.613 | 6.407 | |
| Coefficient of Variation | 22.309 | 22.830 | 39.559 | 22.031 | |
| No. of Listings | 38 | 39 | 51 | 50 | |
| * computed by allocating 'Cotswold' wool price to Gloucestershire alone, and excluding Oxfordshire and Worcestershire from the mean. | | | | | |

Identifications: a. Leominster b. March Wool of Leominster Soke c. Herefordshire, except Leominster d. Cley or Clay Wolds, possibly in Shropshire e. High Lindsey f. Low Lindsey g. Lindsey Marsh h. Kes-
teven i. Cotswold j. Young Cotswold k. Other Gloucestershire l. Moorland m. Yorkshire Wolds n.
Sherburn-in-Elmet o. Lindrick p. Newark q. Nottinghamshire, except Newark and Nottingham-Hatfield
r. Nottingham-Hatfield s. North Holland t. South Holland u. Peak District v. Worcestershire, except
Cotswolds w. Berawm Downs x. Wydown y. Other Kent z. Banstead Down aa. Other Surrey bb. Yorkshire,
except the Wolds, Sherburn, and Lindrick cc. Lesser wools of the county indicated dd. Chiltern Hills
ee. Marrois or Lesser Wools

SOURCES OF Table 1 and 2:

- 1294: Public Record Office, K. R. Exchequer, E. 101/126/7. [See John Munro, 'Wool-Price Schedules and the Qualities of English Wools in the Later Middle Ages, 1270-1499', *Textile History*, ix (1978), 132.]
1337: *Calendar of Close Rolls, 1337-39*, pp. 148-50; *Calendar of Patent Rolls, 1334-38*, pp. 480-82.
1343: *Rotuli Parliamentorum*, II, 138: no. 17; Thomas Rymer, ed. *Foedera, conventiones, litterae*, Record Commission Edition (London, 1816), II, ii, 1225-26.
1357: Corporation of London Record Office, Letter Book G, fol. lx^v-lxi^r; P.R.O., Chancery, Patent Rolls Supplementary, C67/22, m. 14.
1454: *Rotuli Parliamentorum*, v, 275: no. 5. Verified from MS in P.R.O., Chancery: Parliament, C49/29/23.

Yorkshire (two 'lowlands' in East Riding, one 'highlands' in West Riding) and one from central West Riding ('highlands'); only two came, as would be expected, from northern North Riding: Richmond and Cleveland (both 'highlands'). Of the five better quality wools in section B, none came from southern Yorkshire; three or four, from central to northern West Riding (one 'lowlands') and possibly one from central East Riding (if *Walde* = Yorkshire Wolds); and finally, one from northern North Riding (Ryedale — 'highlands'). Furthermore, wools from some contiguous districts in similar terrain were placed in opposing price groups: Craven (A) and Burghshire (B); Cleveland (A) and Ryedale (B), for example. Finally, even if the better quality Yorkshire wools continued to be grown in generally the same districts, we must remember from Table 1 how drastically their prices had fallen, and especially how much more so than the prices of inferior Yorkshire wools, from the mid-fourteenth to mid-fifteenth centuries.

One may conclude, therefore, that the geographic or physical environment of sheep raising — the type of terrain, altitude, temperature variation, climate, pasture conditions, etc. — was not the sole nor necessarily even the chief determinant of wool qualities, as some leading authorities have contended.⁸ In medieval Yorkshire and undoubtedly

elsewhere in England, estate management, flock controls, and sheep breeding may often have been equally important quality determinants, especially in the great age of monastic demesne farming.⁹ Environmental factors, on the other hand, may well have become more decisive quality determinants in the later Middle Ages: when so many demesnes, lay as well as ecclesiastical, were leased or parcelled out to peasants and freeholders; and when a preponderant majority of sheep in former estate regions were being raised under those communal open-field conditions that precluded effective flock management and sheep breeding. Therefore the shift from demesne or estate sheep-raising to peasant farming may have resulted in a deterioration of wool qualities in regions such as Yorkshire where the environment was less favourable to the production of very fine wools than in, say, Herefordshire and the Cotswolds. Consequently that shift, especially from the later fourteenth century, may have made truly fine wools all the more scarce in England, thus explaining their much higher price and the much wider variation in the fifteenth-century wool-price schedules.

The other significant observation to be made about the *corrected* 1357 price schedule is that it more fully confirms the reliability of the so-called 'Nottingham' price list of 1337: or rather, the view that the 1357 parliament totally rejected the 1343 parliament's wool evaluations in favour of those Nottingham prices. Thus the correlation coefficient (the Pearson product-moment '*r*') for the 36 pairs of wool prices appearing in both the 1337 and 1357 lists is an almost perfect 0.977 (with a statistical significance level of 0.000000002!); the coefficient of determination (r^2), or extent of price variation in the 1357 list explained by the variation in the 1337 list, is 0.954; and the mean of the 1357 prices is just 5.1 per cent higher than the 1337 mean. In contrast, the correlation coefficient for the 1343 and 1357 prices (38 pairs) is only 0.757 (though S.L. = 0.00000039); the r^2 is 0.572; and the 1343 mean is 25.8 per cent higher than the 1357 mean.

Again statistical comparisons with the 1454 schedule are far more favourable to the 1357 list than to the one of 1343. In view of a century of major agrarian and commercial changes, one can hardly expect to find very close correlations between fourteenth- and fifteenth-century wool prices. Thus the Pearson '*r*' for the 1357 and 1454 lists is much lower, at 0.754; but that is still a very respectable result (with S.L. = 0.0000004), in view of all those economic changes; the r^2 is 0.569; and the 1357 mean is 14.5 per cent higher than the 1454 mean. But in comparing the 1343 and 1454 lists, we find that the Pearson '*r*' is only 0.460 (with S.L. = 0.0028); the r^2 is an unimpressive 0.211; and the 1343 mean is 37.3 per cent higher than the 1454 mean, undoubtedly too large a difference.

The price relationships between and among these four schedules, the various rankings of wools, and especially the very close correspondence between most prices and rankings in the 1337 and 1357 lists can be seen more clearly in Table 2, more clearly indeed than in my earlier article on wool prices. Unlike Table 7 in that article, which perforce listed the wools for six schedules alphabetically by county of origin, this one lists the wools for the various counties or districts by the descending order of values given in the 1357 price proclamation, from Herefordshire to the four northern counties. Finally this new table should prove useful as the now fully verified and only correct published version of that strangely neglected 1357 wool-price schedule.¹⁰

REFERENCES

- ¹ John H. Munro, 'Wool-Price Schedules and the Qualities of English Wools in the Later Middle Ages, c. 1270-1499', *Textile History*, ix (1978), pp. 118-69. See also note 3 below.
- ² Sharpe's version reads: 'Leicester, viz., Elmet, Burghshire, Ripshire, Walde, and Ridale, 9 $\frac{1}{2}$ marks;'. Perhaps I should have paid greater attention to the place-names in compiling my wool-price tables and so recognized at least Elmet as a Yorkshire district; but surely Sharpe, as editor of the Letter Books, was even more obliged to have done so. When I contacted the editor of *Textile History* about Sharpe's error, on 8 September 1978, it was too late to correct the proofs.
- ³ I owe the C67/22 reference to T. H. Lloyd, *The English Wool Trade in the Middle Ages* (Cambridge, 1977), p. 331, n. 47, where he also states that 'the only printed version' is in Sharpe's *Letter Book G*, p. 87. Apart from a brief reference, Lloyd did not make use of this 1357 schedule; and I note, with mixed feelings, that he also did not discover the error in Sharpe's edition.
- ⁴ *Rotuli Parliamentorum*, iv, pp. 250-51: no. 39; *Statutes of the Realm*, II, pp. 217-19 (2 Hen. VI c. 4). See Munro, 'Wool-Price Schedules', pp. 145-46.
- ⁵ *Rot. Parl.*, v, p. 503: no. 11; *S.R.*, II, pp. 392-93 (3 Ed. IV c. 1).
- ⁶ For the following place-name descriptions, I consulted: A. H. Smith, *The Place-Names of the North Riding of Yorkshire* (Cambridge, 1928); A. H. Smith, *The Place-Names of the East Riding of Yorkshire and York* (Cambridge, 1937); A. H. Smith, *The Place-Names of the West Riding of Yorkshire*, 8 vols. (Cambridge, 1961-63); Eilert Ekwall, *Concise Oxford Dictionary of English Place-Names* (Oxford, 1960); John Bartholomew, *Survey Gazetteer of the British Isles*, 9th ed. (Edinburgh, 1966); and various atlases. All direct quotations are from A. H. Smith, *Place Names*.
- ⁷ See Munro, 'Wool-Price Schedules', pp. 119-35.
- ⁸ See Peter Bowden, 'Wool Supply and the Woollen Industry', *Economic History Review*, 2nd ser. ix (1956), pp. 44-50; Bowden, *The Wool Trade in Tudor and Stuart England* (London, 1962), pp. 25-37; William Youatt, *Sheep: Their Breeds, Management, and Diseases* (London, 1837), pp. 65-100. See also note 9 below.
- ⁹ See Noel Denholm-Young, *Seignorial Administration in England* (London, 1937), pp. 53-62; David Knowles, *The Religious Orders in England* (3 vols. Cambridge, 1948-61); F. M. Page, *The Estates of Crowland Abbey* (Cambridge, 1934); R. A. L. Smith, *Canterbury Cathedral Priory* (Cambridge, 1943); Edmund King, *Peterborough Abbey, 1086-1310* (Cambridge, 1973), pp. 154-66; J. Raftis, *The Estates of Ramsey Abbey* (Toronto, 1957), esp. pp. 144-57; R. H. Hilton, *A Medieval Society: The West Midlands at the End of the Thirteenth Century* (London, 1966); pp. 65-87; and especially Dorothea Oschinsky, ed. *Walter of Henley and Other Treatises on Estate Management and Accounting* (Oxford, 1971), pp. 182-87, 286-87, 336-39; and Robert Trow-Smith, *A History of British Livestock Husbandry to 1700* (London, 1957), pp. 142-44, 148-68. He cites other evidence to show that Lindsey breeds from Lincs. were being sent to estates in Yorkshire and Wiltshire from the thirteenth century, and that certain Wiltshire estates bred lambs for sale to develop flocks at other manors (pp. 142-44, 161-62). But he also stresses that, whatever the breed, 'the character of a fleece will change with environment'; and also, in terms of flock management, that 'excessively poor keep, illness, and age will lower the strength and dim the lustre of wool, and a chalk soil [for pasture] will harden the fleece'; and finally, that wethers (gelded rams) produce much the best quality fleeces (pp. 149, 161).
- ¹⁰ This Table 2 also includes the complete set of 51 wool prices from the 1454 parliamentary schedule, not all of which were given in Table 7 of my 'Wool-Price Schedules', pp. 140-42; and this Table 2 also corrects the price of Gloucester (Cotswold) wools for 1454 in that Table 7: £8.333, and not £8.667. But the price of Cotswold wools for 1454 was correctly given as £8.333 in Table 8, p. 147, and in Table 10 p. 158.