

# Yeomen and Metalsmiths: Livestock in the Dual Economy in South Staffordshire 1560–1720<sup>1</sup>

By PAULINE FROST

SOUTH Staffordshire has a long history of rural domestic industry, of intense specialization in the production of metal-ware, and of tiny individual enterprises. Coal was being mined from the Ten Yard Seam as early as 1273 and iron ore was extracted from at least 1291.<sup>2</sup> Nailers were first recorded at work in Dudley in 1425 and the trade soon spread to the countryside, where the small metal crafts reached their peak as a domestic industry in the seventeenth century. Between 1560 and 1720 no less than 20 per cent of all the workers in the region for whom probate inventories survive were metal craftsmen, two-thirds of them nailers.

The metal-smiths were not, at first, supported solely by their labours at the forge but practised a dual economy, combining nail, lock or spur-making with stock-rearing, gardening, and, occasionally, arable husbandry.<sup>3</sup> This mixed economy persisted in residual form until a very late period. In 1837 about 10 per cent of families in industrial West Bromwich owned a pig or a cow, and pig-keeping in gardens or allotments was to be found in the Black Country well into the present century.<sup>4</sup>

The dual economy of agriculture and

domestic craftwork, which reached its apogee in the seventeenth and early eighteenth centuries, has received considerable attention from scholars.<sup>5</sup> Yet, despite Joan Thirsk's demonstration of a close relationship between rural industry and livestock rearing, little has been written specifically on this subject.<sup>6</sup>

Livestock ownership is one of the best indicators of regional economic and occupational contrasts in South Staffordshire between 1560 and 1720. Since many more craftsmen owned stock than held arable land, the study of livestock enterprises is essential to the clarification of structure of the dual economy. It is known that craftsmen often owned a cow or a pig; but how many animals did they actually own, which types of stock were preferred by yeomen and smiths, and to what degree did herd sizes and stock combinations vary from the farmers to the craftsmen? The present study investigates the metal-workers' livestock enterprises compared with those of the full-time farmer, attempts to clarify the symbiosis of farm and forge, and traces the changing economic fortunes of the metal-workers of south Staffordshire from the sixteenth century to the beginning of the eighteenth century.

<sup>1</sup> I am grateful to Dr S Robert Aiken and Dr D B Frost for their criticism and advice during the preparation of this paper.

<sup>2</sup> *Staffordshire Historical Collections*, 1911, pp 155–6.

<sup>3</sup> Similar combinations of metalworking and agriculture were to be found around Sheffield at the same date. Cf D Hey, *The Rural Metalworkers of the Sheffield Region*, Leicester, 1972.

<sup>4</sup> G J Barnsby, 'The standard of living in the Black Country in the Nineteenth Century', *EcHR* (2nd ser) XXIV, 1971, p 231.

<sup>5</sup> For example J Birrell, 'Peasant Craftsmen in the Medieval Forest', *Ag Hist Rev* XVII, 1969, pp 91–107; Hey, *op cit*. The extractive industries are particularly well served: see, for example, C J Hunt, *The Leadminers of the Northern Pennines in the Eighteenth and Nineteenth Centuries*, Manchester, 1970; I Blanchard, 'The Miner and the Agricultural Community in late Medieval England', *Ag Hist Rev* XX, 1972, pp 93–106.

<sup>6</sup> J Thirsk, 'Industries in the Countryside', in F J Fisher (ed), *Essays in the Economic & Social History of Tudor and Stuart England*, Cambridge, 1961.

## I

Probate inventories dating from the sixteenth and seventeenth centuries contain a wealth of information about the economic enterprises of individuals. In contrast to the glebe terriers and manorial surveys which refer primarily to tenurial matters and legal rights, the inventories provide quantitative information about farm and business operations. As a result they have been used in a number of detailed studies of regional agrarian systems.<sup>7</sup> Except for Hey's work in south Yorkshire, however, they have been little used to elucidate the relationship between farming and crafts in the dual economy. Characteristically they contain very full listings of livestock, distinguishing different types of animals, numbers, ages, and estimated values, and this makes them particularly valuable for the present study. The inventories are not, however, without their drawbacks. Under-valuation of goods is thought to have been common, and, more seriously, they do not represent the whole range of society, being biased towards the middle stratum. The inventories of the aristocracy, gentry and of the very rich lie in the archives of the Archdiocese of Canterbury, and are not available for examination. On the other hand, the very poor were unlikely to make wills or to need inventories.

In the present work, which is based largely on the probate inventories, every one of the surviving inventories dated between 1560 and 1720 for south Staffordshire was included in the analysis. It therefore deals with a large section of the community, ranging from labourers to the lesser gentry and clergy.<sup>8</sup> The husbandman, yeoman, and craftsman classes

are well recorded and, while the poorest classes are almost certainly under-represented, as many as 10 per cent of all the surviving inventories from the area are those of impoverished labourers. It was from this last class that the metal-smiths were most likely to be recruited. In the following section the physical setting of south Staffordshire is described and the distribution of agrarian systems and rural domestic industry outlined. Then the relative importance of livestock and arable farming in the area between 1560 and 1720 is assessed, and this is followed by a more detailed analysis of livestock ownership by farmers and metal-workers both in the later sixteenth century and at the end of the seventeenth century.

## II

In Britain and Europe rural industry has traditionally been associated with upland stock-rearing regions, and the metal trades of south Staffordshire were no exception. Most recent writers have seen Staffordshire as an area transitional between fielden and highland agricultural systems, with the southern part of the county partaking of a 'wood-pasture' type of farming economy, this last term implying considerable variation in field systems and agricultural enterprises.<sup>9</sup> Within this zone physical conditions vary considerably, there being a fundamental difference between the uplands of the south Staffordshire plateau and the lower lands to the east and west of it (Fig 1). The greater part of the plateau lies between 120 and 150 m. (400–500 feet), although its central ridge rises to 264 m (866 feet) south of Dudley. Flanking the ridge, but still above 120 m, are the middle (or productive) and upper coal measures. The soils of this upland area show no uniformity except in their general unsuitability for arable

<sup>7</sup> J Thirsk, *English Peasant Farming*, 1957; J Yelling, *Common Field and Enclosure in England 1450–1850*, 1977.

<sup>8</sup> All the inventories filed with the Consistory Court of The Diocese of Lichfield and those belonging to its Peculiar Jurisdictions are preserved in the Lichfield Joint Record Office (LJRO). There are inevitable gaps in the record, the most important being for Wolverhampton where the inventories predating 1700 have been removed in the past and can no longer be traced. Despite this, 1809 inventories suitable for analysis exist.

<sup>9</sup> J Thirsk (ed), *Agrarian History of England and Wales*, IV, Cambridge, 1967, pp 99 *et seq*; B K Roberts, 'Field Systems in the West Midlands' in A R H Baker and R A Butlin, *Studies in Field Systems in the British Isles*, Cambridge, 1973, pp 188–231.

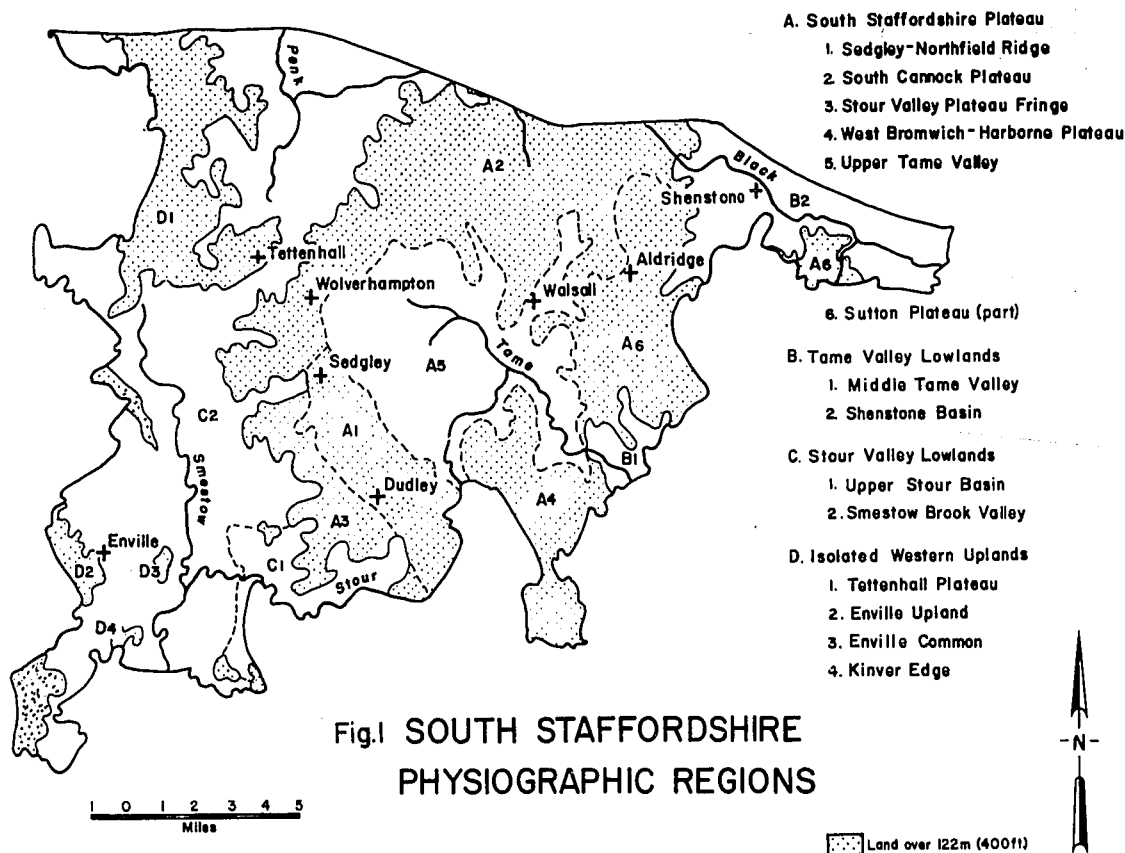


Fig.1 SOUTH STAFFORDSHIRE  
PHYSIOGRAPHIC REGIONS

farming, for they range from thin soils on the dolerite and limestone ridge and the pebbly, acid soils of West Bromwich Heath, to the stiff, tenacious, and often water-logged clays of the coal measures and glacial drifts.

The lowlands to the west and north-east of the plateau, on the other hand, have loam soils, which are easily worked, freely drained and responsive, and which comprise some of the best arable land in the county. They are to be found west of the plateau in a belt running from Pattingham to Kinver, and in the east in the Shenstone-Lichfield area, where today they are given over to market-gardening.

This physical dichotomy was reflected in the agrarian systems found in the region in the seventeenth century. Although Staffordshire lay outside the main champion region of the English midlands, regular three-field systems and mixed farming economies predominated in the lowlands of the southern part of the county, where the best arable soils occurred.

Even there, however, the common fields were a far less significant element in the agrarian landscape than, for example, in the champion region of Warwickshire.<sup>10</sup> The farming systems of the plateau showed all the diversity to be expected in an upland area of mixed, and generally infertile soils. The number of common fields varied from two at West Bromwich to six at Sedgley, while some townships, such as Rowley Regis on the central ridge, lacked open arable completely.<sup>11</sup>

<sup>10</sup> Roberts, *op cit*, p 192, comments that the townships in the fielden areas of south Warwickshire might have as much as 70–80 per cent of their area in common arable. In south Staffordshire the proportion was much less. For example, in the lowland township of Perton and Trescott only 20–30 per cent of the total area was occupied by the common fields in the late sixteenth century. (Staffs RO: D593/J22/4).

<sup>11</sup> LJRO: probate inventory of Edward Grove of West Bromwich, 6 Jan 1669; Dudley Archives (DA) 7/9; 'Survey of the Manor of Rowley Regis, 1556', *Staffs, Hist Coll*, 1936. The names of closes here powerfully suggest the bleakness of the area: Bare Moor, The Heath, Hell Meadow, Caldmore, Windyhurst.

Communal arable fields in this area were much smaller in size than those of the lowlands, rarely exceeding fifty acres, and in the large parish of Sedgley only 11 per cent of the area was in open strips in 1613.<sup>12</sup> This was counter-balanced by the existence of extremely large wastes, which were for the most part unstinted, allowing the landless labourer to keep some animals to increase his income and to improve his family's diet. The abundance of common land permitted the practice of making temporary intakes from the waste to supplement the communal arable as well as the more usual form of encroachment by the taking in of closes of pasture to be held in severalty.<sup>13</sup> Under such conditions it was not surprising that livestock rearing predominated over crop farming in the early modern period.

Within this agrarian milieu rural industry experienced a rapid expansion from the mid-sixteenth century, but this growth was largely confined to the plateau. Two major influences helped to create this pattern. Domestic industry is labour-intensive and a large supply of cheap labour is one of the essentials for its growth.<sup>14</sup> Joan Thirsk has stressed the fact that the upland, stock-rearing districts of England suffered from a considerable degree of concealed under-employment in the seventeenth century and that alternatives to agricultural work were welcomed.<sup>15</sup> In south Staffordshire the large, open wastes attracted landless families from surrounding fielden counties who joined the potential industrial labour force.<sup>16</sup> The very real need for subsidiary employment explains the rapidity with which nailing and the other

metal trades spread throughout the coalfield and plateau area in the later sixteenth century, after Birmingham began to specialize in the more lucrative finishing trades and brass-founding. Not only were labour conditions ideal in this area but the raw materials to sustain the metal trades were at hand. Coals for the smith's hearth were readily and cheaply available from surface workings, many of them on the common; while bar iron and nail rod were produced in forges and slitting mills on the periphery of the plateau.

Compared with conditions on the south Staffordshire plateau the lowlands had better soils and a more balanced mixed farming economy. The commons were smaller and were more likely to be closed to squatters, with the result that population growth was largely internal and comparatively slow. Although some of the region's blast furnaces and finery forges were located in these areas fuel was always a problem, and although these parishes were within easy reach of the middlemen from Birmingham, Wolverhampton and Dudley domestic metal-working industries failed to develop in them.

### III

The relative importance of arable crops and livestock in south Staffordshire in the early modern period may be gauged by a comparison of the value of livestock recorded in the inventories with the total value of crops and stock. Table 1 shows that in the late sixteenth century there was a marked emphasis on livestock production in south Staffordshire as a whole, livestock contributing no less than 78.6 per cent of the total value of farm products.<sup>17</sup> The contrast in animal production between the plateau and the lowlands was only incipient at this period, but was later to emerge more clearly. By the end of the next century the plateau had stock values above the regional average with

<sup>12</sup> DA 7/9.

<sup>13</sup> These topics are dealt with in more detail in P Frost, 'The Growth & Localisation of Rural Industry in South Staffordshire, 1560-1720', unpublished PhD thesis, Birmingham University, 1973, Ch 4, 5.

<sup>14</sup> H Kellenbenz, 'Les industries rurales en Occident de la fin du Moyen Age au XVIII siècle', *Annales ESC*, XVIII, 1963, pp 833-83; D M Smith, 'The British Hosiery Industry in the mid-nineteenth century', *Trans IBG*, XXXIII, 1963, pp 125-42.

<sup>15</sup> Thirsk, 1961, op cit.

<sup>16</sup> Frost, op cit, Ch 8.

<sup>17</sup> In order to minimize inaccuracies only inventories for the harvest months in August, September and October have been used.

TABLE 1  
South Staffordshire  
Stock value as percentage of total stock and crop value

| Time period<br>occupational group | Coalfield parishes |                      | (Harvest months)<br>Lowland parishes |                      | Whole area |                      |
|-----------------------------------|--------------------|----------------------|--------------------------------------|----------------------|------------|----------------------|
|                                   | %                  | No of<br>inventories | %                                    | No of<br>inventories | %          | No of<br>inventories |
| <i>1560-1600</i>                  |                    |                      |                                      |                      |            |                      |
| Farmers*                          | 78.1               | 4                    | 76.8                                 | 1                    | 77.9       | 5                    |
| Metal-workers†                    | 71.8               | 3                    | —                                    | 0                    | 71.8       | 3                    |
| All occupations                   | 79.1               | 33                   | 77.9                                 | 16                   | 78.6       | 49                   |
| <i>1601-40</i>                    |                    |                      |                                      |                      |            |                      |
| Farmers                           | 67.7               | 18                   | 60.1                                 | 14                   | 63.6       | 32                   |
| Metal-workers                     | 77.1               | 9                    | —                                    | 0                    | 77.1       | 9                    |
| All occupations                   | 70.3               | 57                   | 62.2                                 | 29                   | 66.3       | 86                   |
| <i>1641-80</i>                    |                    |                      |                                      |                      |            |                      |
| Farmers                           | 59.1               | 24                   | 59.9                                 | 14                   | 59.5       | 38                   |
| Metal-workers                     | 56.4               | 26                   | —                                    | 1                    | 56.5       | 27                   |
| All occupations                   | 57.5               | 73                   | 59.9                                 | 21                   | 58.5       | 94                   |
| <i>1681-1720</i>                  |                    |                      |                                      |                      |            |                      |
| Farmers                           | 59.0               | 32                   | 54.5                                 | 13                   | 57.7       | 45                   |
| Metal-workers                     | 62.9               | 36                   | 45.2                                 | 5                    | 59.6       | 41                   |
| All occupations                   | 60.3               | 125                  | 54.0                                 | 29                   | 58.8       | 153                  |

\* All those designated yeoman or husbandman in the inventories.

† Metal-workers, by far the largest and most representative group of industrial craftsmen in the Black Country, were taken as a sample of all the craftsmen in the area.

Source: Lichfield Joint RO — Probate Inventories (Consistory Court and Peculiar Jurisdictions).

livestock contributing more than 60 per cent of farm production values compared with 54 per cent in the lowlands. Over the entire period, however, the whole of south Staffordshire showed a distinct decline in the relative importance of livestock in the farm economy, the overall percentage value falling to 58.8 per cent in 1681-1720.

A similar trend was apparent to the east of Birmingham in the northern part of the Forest of Arden and has been attributed by Skipp to the greatly increased number of poor, landless families and a growing demand for cheap food.<sup>18</sup> Many of the changes that

Skipp notes in Solihull and Yardley in the early seventeenth century are paralleled in the Black Country.

Winter corn, which made up over 55 per cent of all the grain grown on the plateau between 1560 and 1600, fell to 35 per cent of the total between 1601 and 1640 and to a mere 24 per cent between 1641 and 1680.<sup>19</sup> It was replaced by spring-sown barley and oats, for these grains, being cheaper, were more in demand among the poor. Convertible husbandry, which increased overall grain production, was also making strides in south Staffordshire. Temporary leys or 'leasows'

<sup>18</sup> V Skipp, *Crisis and Development: an ecological case study of the Forest of Arden, 1570-1674*, Cambridge, 1978.

<sup>19</sup> LJRO probate inventories.

began to appear in the communal open fields of Wolverhampton as early as 1580 and references to them became more frequent throughout the area in the early seventeenth century.<sup>20</sup> This was accompanied by the consolidation and enclosure of open field holdings.<sup>21</sup>

The evidence for a change from the raising of beef cattle to dairying is less well attested in south Staffordshire than in Arden. The first mention of a 'dayry hous' in the inventories occurs in 1639, considerably later than those mentioned by Skipp.<sup>22</sup> Nonetheless some substantial yeomen were taking advantage of improved markets for dairy products by maintaining herds of milking cows. For example, Thomas Baylies of Darlaston had in 1615 nineteen cows, two weanling calves, six yearlings, and one two-year-old heifer, as well as a bull. He also had butter and cheese in store worth £8 13s 4d.<sup>23</sup> These changes in agricultural production were undoubtedly encouraged by the increasing number of landless labourers and craftsmen on the plateau and by the growth of the urban market in Birmingham, Wolverhampton, Walsall, and Dudley.

It might be argued that up to 1650 the relative decline in the importance of livestock was more apparent than real, as corn prices were rising more quickly than livestock prices. However, the onset of the depression in the arable sector soon after mid-century meant that livestock prices rose faster than those for corn. Despite this, the contribution made by livestock to the total value of farm production in south Staffordshire continued to decline and this is further evidence for increased demand for bread corn among the urban and industrial population. Table 1

shows that the greatest advance in arable crops occurred in the areas with good loam soils, that is to say, in the western lowland parishes and in Shenstone.

As the seventeenth century drew on, an increasing proportion of people owned no livestock at all. For example, only 10 per cent of the inventories mentioned no cattle in 1560–1600, but 41 per cent were cattleless in 1680–1720. At the same time the average size of herds was decreasing, and this despite rising prices for livestock products. This suggests that many people kept cattle for subsistence rather than commercial purposes and, as a result, they did not respond to a rising market. On the contrary, their economic toehold in livestock raising was becoming more precarious. Obviously significant economic and social changes were occurring, but did they affect the whole area and the whole community equally, or were the economies of farmers and metal-workers diverging?

#### IV

In the later sixteenth century the metal-workers comprised only a very small minority of the rural population of south Staffordshire, but subsequent recruitment to their ranks from the agricultural community was to be very rapid, and they were already concentrated on the plateau. It is interesting therefore to examine in more detail the regional and occupational variations in livestock ownership already existing at that early date (Table 2). There is no doubt that the dominant agricultural enterprise in the region between 1560 and 1600 was cattle rearing, for 90 per cent of the inventories surviving from that period record some cattle. Compared with other cattle-raising areas of England, however, south Staffordshire was a region of small herds, with a median herd size of only six despite the existence of large commons. In the fenlands of Holland in Lincolnshire the median herd size at this time

<sup>20</sup> Humphrey Perrye had 'one leasowe called Thornes Hayes of four acres in Horsley Field', in Wolverhampton in 1580. Staffs RO: D593/J/22/6.

<sup>21</sup> The evidence for this, drawn from the glebe terriers and other parochial records and the Dudley Archives, is fully discussed in Frost, *op cit*, pp 157–73.

<sup>22</sup> LJRO prob inv. Francis Tomkyson, Wednesbury 1639 (Consistory Court).

<sup>23</sup> *Ibid* prob inv. Thomas Baylies, Darlaston, 1615.

TABLE 2  
Numbers of persons owning stock at death, 1560–1720

| Period     | Total no of<br>inventories | Inventories with<br>animals |      | Inventories without<br>animals |      |
|------------|----------------------------|-----------------------------|------|--------------------------------|------|
| Stock type |                            | no                          | %    | no                             | %    |
| 1560–1600  | 250                        |                             |      |                                |      |
| Cattle     |                            | 224                         | 89.6 | 26                             | 10.4 |
| Sheep      |                            | 186                         | 74.4 | 64                             | 25.6 |
| Swine      |                            | 167                         | 66.8 | 83                             | 33.2 |
| Horses     |                            | 165                         | 66.0 | 85                             | 34.0 |
| Oxen       |                            | 96                          | 38.5 | 154                            | 61.5 |
| 1601–40    | 419                        |                             |      |                                |      |
| Cattle     |                            | 301                         | 74.2 | 108                            | 25.8 |
| Sheep      |                            | 270                         | 64.4 | 149                            | 35.6 |
| Swine      |                            | 215                         | 51.3 | 204                            | 48.7 |
| Horses     |                            | 244                         | 58.2 | 175                            | 41.8 |
| Oxen       |                            | 76                          | 18.1 | 343                            | 81.9 |
| 1641–80    | 348                        |                             |      |                                |      |
| Cattle     |                            | 248                         | 71.3 | 100                            | 28.7 |
| Sheep      |                            | 176                         | 50.6 | 172                            | 49.4 |
| Swine      |                            | 184                         | 52.9 | 164                            | 47.1 |
| Horses     |                            | 286                         | 53.4 | 162                            | 46.6 |
| Oxen       |                            | 41                          | 11.8 | 307                            | 88.2 |
| 1681–1720  | 790                        |                             |      |                                |      |
| Cattle     |                            | 463                         | 58.6 | 327                            | 41.4 |
| Sheep      |                            | 240                         | 31.3 | 550                            | 68.7 |
| Swine      |                            | 344                         | 42.3 | 456                            | 55.7 |
| Horses     |                            | 342                         | 43.3 | 448                            | 56.7 |
| Oxen       |                            | 26                          | 3.3  | 764                            | 96.7 |

Source: Lichfield Joint RO — Probate Inventories (Consistory Court and Peculiar Jurisdictions).

was ten, and even in the predominantly sheep-rearing Lincolnshire Wolds nine was normal.<sup>24</sup>

The herds of Arnold Okell of Tipton and George Symcocks of West Bromwich in 1580, numbered at thirty-five and thirty-four respectively, were unusually large for south Staffordshire.<sup>25</sup> Both men appear to have been cattle breeders and graziers, with cattle pastured in closes taken out of the heaths.

Okell had eleven one-year-old cattle, eleven two-year-olds and seven three-year-olds pastured at Rowley Regis, while Symcocks sold the cattle bred on his farm to neighbours for fattening or directly to the butcher. The grazing of fat-stock was carried on by most of the larger farmers, some of whom appear to have supplemented their herds with store cattle bought from Welsh drovers *en route* to London.<sup>26</sup> One farm inventory, dated 1591, had no breeding stock but listed 'xiiij fattening

<sup>24</sup> J Thirsk, *English Peasant Farming*, 1957, pp 70, 87.

<sup>25</sup> LJRO prob inv. Arnold Okell, Tipton, August 1581 (Peculiar Juris); prob inv George Symcocks, West Bromwich, December 1577 (Consistory Court).

<sup>26</sup> W J Boyd, 'Staffordshire suits in the court of Star Chamber, temp Hen VII and Hen VIII', *SHC* ns X, 1907, p 104.

kine'.<sup>27</sup> There is no suggestion that special-purpose dairy herds were kept. Milch cows were rarely mentioned specifically, and most inventories record butter and cheese in quantities sufficient for only one household.

Regional differences within south Staffordshire were as yet little defined, the median herd size being similar throughout the area. A slightly greater range of cattle ownership seems to have been found, however, on the plateau compared with the lowlands. The former had slightly higher proportions of people with six cows or more (51.5 per cent as opposed to 49.4 per cent) and of those with no cattle at all (12.3 per cent compared with 8.9 per cent). Moreover, of the metal craftsmen, who were mainly found on the plateau, only 5.9 per cent were entirely cattleless. These facts suggest that the coalfield parishes of the Plateau already had a slightly wider range of economic classes than those of the lowlands, and also that the metal-smiths were on average better off than many of the poorer husbandmen and agricultural labourers. It was this last class, landless and cattleless, that was to turn increasingly to industrial employment as a means of ameliorating its economic situation.

Sheep, in general, took second place to cattle in the sixteenth century, with 74.4 per cent of inventories mentioning them. Forty-two per cent of the inventories record flocks of more than twenty, but, compared with the moorland sheep runs of the Pennines in the north of the county, flocks were small with a median size of only twenty-seven.<sup>28</sup> Between 1560 and 1600 only nineteen persons (7.4 per cent) are recorded as having flocks of 100 or more, the largest flock being owned by William Wyrley, Esq of Handsworth, who

possessed 500 sheep at his death.<sup>29</sup> The importance of sheep varied regionally within the area, for on the light soils and heaths of the lowlands 80 per cent of the inventories record some sheep, compared with only 71.7 per cent on the plateau, and their median flock sizes were forty and twenty respectively.

Sheep played a much less important part in the farming enterprises of the metal-smiths than did cattle. Forty per cent of the metal-workers were totally lacking in sheep, compared with only 24 per cent of the purely farming community. On the plateau the median flock size of the metal-workers who did own sheep was only fifteen, compared with forty-four for farmers. There is a strong possibility that the smiths were not representative of the rural craftsmen as a whole, as it is likely that those potential industrial workers who owned sheep turned to carding, spinning or weaving rather than nail-making. The textile industries, however, played a very minor role in south Staffordshire throughout its history.<sup>30</sup>

As far as the number of inventories mentioning them is concerned, swine were the third most important animal kept in late sixteenth-century south Staffordshire, but numerically they fall very far short of cattle and sheep. About one-third of the inventories record none, and only 15.6 per cent had more than five. The largest herd on record was fourteen and, with an overall median herd size of only three it seems clear that pig-rearing was carried on in very small units. Farmers kept rather more in the lowland region than on the plateau, but there is no evidence of large-scale swine-rearing, even in the former Forest of Kinver.

After cattle, pigs were the most important animal in the economy of the domestic craftsman. Over 83 per cent of the craftsmen had at

<sup>27</sup> LJRO prob inv. Henry Partriche, West Bromwich, 1591 (Consistory Court).

<sup>28</sup> In the sixteenth century the median flock sizes in Lincolnshire were as follows: Fenland twenty, Marshland forty, Wolds thirty-four, Claylands twenty-six. (Thirsk, 1957, op cit, pp 34, 72, 87, 106.) In Leicestershire in 1588 the median was thirty.

<sup>29</sup> LJRO prob inv. Wm Wyrley, Handsworth, Mar 1562 (Consistory Court).

<sup>30</sup> Frost, op cit, pp 578-9. For example, the Sedgley parish registers between 1578 and 1600 record five weavers compared with 229 nailers, and the Wednesbury registers of 1681 to 1706 have only five weavers but 106 nailers and sixty-one colliers.

least one pig, compared with a figure of only 66.8 per cent for all occupations, although few craftsmen had more than five pigs. Both the coalfield area and the metal-craftsmen as a group characteristically had smaller numbers of pigs per owner compared with the lowland and the farming community, the median number owned being two and four respectively. Pig-keeping was traditionally associated with industry in the Black Country and the swine were fed on kitchen scraps and scavenged on the waste.

Even at this date the ownership of horses was more widespread than that of oxen, with two-thirds of the recorded individuals possessing at least one horse and only 38 per cent having any oxen. This fact, and the regional and occupational variations in horse and ox ownership, reflect the different functions of the two animals. The horse, with its greater speed and handiness and above all, its versatility, was used for ploughing, carting and other farm activities: but it could also be found powering gins to raise coal or water, and in pack trains carrying coals, iron, provisions, and other commodities, as well as employed as a riding animal. In contrast, the use of the ox was almost wholly confined to ploughing, harrowing and the like.

Not surprisingly, therefore, the farming community was more likely to own oxen than the craftsmen. Forty-six per cent of farmers owned at least one, and 31 per cent had more than five, the median number being six. Only the full-time farmer with a large area of arable would find it necessary to keep a whole team, and the greater extent of arable land and the higher proportion of substantial farmers to be found in the lowlands were reflected in a higher level of ox ownership there. In the inventories 63.2 per cent of recorded persons owned oxen in the lowlands, compared with only 25.2 per cent on the plateau. On the heavy soils of the upper coal measures, on the other hand, ox teams tended to be larger than in the lowlands, the median number being six as opposed to four on the light soils, the larger

team being a response to the greater difficulty of ploughing on the clays.

Very few craftsmen owned oxen in the sixteenth century; only 5.5 per cent had any at all, and only one had more than two. As oxen were kept mainly for ploughing this tends to confirm that few craftsmen had large arable holdings, and that the men who adopted nail-making and similar trades were drawn from the class of small husbandmen, herdsmen and labourers who depended on livestock for their livelihood. The number of craftsmen who owned horses, on the other hand, was very high, for at least two-thirds of the industrial community had at least one and some had as many as five. This compares interestingly with the overall level of horse ownership on the plateau of just below 60 per cent, and implies that the man with industrial interests in that area was rather more likely than average to own a horse. The horse was invaluable in the mining and iron-working region for the transport of coal, ironstone, charcoal, and finished products, and it was very much to the smith's advantage to keep at least one nag so that he could obtain raw materials and maintain links outside his immediate neighbourhood.

Despite the importance of the horse in the developing industries of the plateau, regionally speaking the individual level of horse ownership was higher in the lowlands, where 78 per cent of recorded persons owned horses at their death in contrast with not quite 60 per cent in the uplands. This probably reflects the greater rural prosperity of the lowlands, where any substantial yeomen owned both an ox team and horses, whereas the farming community of the plateau had more of the poorer husbandmen who could not afford either and who were likely candidates for entry into the growing ranks of the part-time smiths.

The rural craftsman at the end of the sixteenth century, therefore, still had strong links with the agrarian economy. The small area of open-field arable, which even then was being reduced by enclosure, must have meant

that a large proportion of families in south Staffordshire had little or no arable land, and depended largely upon stock rearing. The stock value percentages show this to have been the case, and this situation became steadily more common as the population increased. Of the poorer, landless families, it seems that many took up subsidiary crafts, particularly nail-making and other small metal manufactures, to supplement their income sufficiently to buy corn. Figures from the probate inventories show that the metal-workers generally had some stock, but not enough to make a living from stock rearing or grazing alone. Before 1600 the average metal-worker, with five or six cows and a few sheep in a close attached to his cottage, or grazing on the waste, and two pigs foraging for food, must never have lacked the staples of country life — milk, cheese and bacon. His trade provided him with cash to buy bread and other necessities and he was probably prosperous enough to own a horse. At this point in the history of Staffordshire the financial situation of the craftsman must have been a happy one compared with the landless labourer who had no subsidiary trade. At this period, too, the symbiotic relationship between agriculture and industry had not broken down and few craftsmen relied solely on nail-making for a living. Thereby they avoided the worst effects of the constant downward pressure upon wages which was to depress the living standards of craftsmen in the following century.

## V

During the seventeenth century the number and importance of the metal-craftsmen in south Staffordshire increased very greatly, until in 1641–80 they almost equalled the farming group and comprised almost one-third of the recorded population.<sup>31</sup> At the same time, far-reaching changes which were

almost certainly related to the increasing emphasis on rural industry, were taking place in the pattern of livestock rearing, and indeed in agriculture as a whole in south Staffordshire.

One of the more important trends was that a relatively smaller proportion of families had any cattle, the percentage of cattleless inventories rising sharply from 25.8 per cent in 1601–40 to 41.4 per cent in the period 1681–1720. Concomitant with this was a drop in the proportion of inventories with more than five cattle, from 30.8 per cent to 23.2 per cent, the median herd size dropping from five to four. Elsewhere in the country the reverse was true. The depression affecting arable farming following 1650 led to a rise in stock prices relative to prices for corn, and an increase in the number of animals kept. The experience of both Lincolnshire and Kent was that many more cattle were kept in all areas except the sheep-rearing regions of the marshes and the Kentish Downs.<sup>32</sup> This also seems to have been the pattern in the non-industrial parts of Staffordshire.

Within south Staffordshire it was the coal-field and plateau area which was most affected by the drop in the number of cattle owners, for the proportion of cattleless men there rose from 24.7 per cent to 43.7 per cent between 1601 and 1720, compared with a change from 28.2 per cent to 34.3 per cent in the lowlands. By 1720 the median herd size on the plateau was only half that of the lowlands. These figures strongly suggest that, within the region where rural industry was important, industry and agriculture were becoming separated from each other as ways of life.

Staffordshire cattle were mainly of the black, long-horned breed of the Pennine counties, good milkers and draught animals which also fattened well.<sup>33</sup> The main stock rearing enterprise in south Staffordshire in the seventeenth century continued to be the

<sup>31</sup> Ibid, p 239.

<sup>32</sup> Thirsk, 1957, op cit, pp 139, 153, 175, 189; C W Chalklin, *Seventeenth Century Kent*, 1965, p 96.

<sup>33</sup> J Thirsk, 'Horn & Thorn in Staffordshire', *N Staffs, Jnl of Fld Studies* IX, 1969, p 4.

breeding and fattening of cattle. Occasionally, inventories contain a breakdown of cattle by age, which gives a picture of the herd of the farmer who bred his own cattle. For example, in 1676 John Mitchell of Lower Penn owned seven cows, six calves, four one-year-old beasts, two twinter or two year-old heifers, one bull and two three-year-old heifers.<sup>34</sup> The lack of specific mention of young beasts over the age of three years, not all of which could have been added to existing herds, suggests that cattle were raised to the age of three years and then sold to the butcher or to neighbouring farmers for fattening. Winter crops of pulses were grown locally for fattening cattle. In 1796 cattle bred in Staffordshire were being fattened near London for the metropolitan market.<sup>35</sup> In the seventeenth century those who did not breed their own store-cattle often bought them for fattening, an enterprise which many craftsmen went in for because of the ease with which it could be combined with industrial work. Thomas Parkhouse of Wednesbury, a potter who died in 1630, possessed two calves 'att the stake bought for to reare'.<sup>36</sup>

Dairying was locally important, but always subsidiary to the raising of fat-stock. Large amounts of cheese are recorded in many inventories, and it may have been produced in marketable amounts, although only for local markets. The same was true of butter and certainly, in the eighteenth century, Wednesbury became well-known as a market for this commodity. Even in the later seventeenth century some metal-workers maintained themselves at a reasonable level of prosperity by practising a combination of farming and industry. Such a case was the nailer of Birchills in Walsall parish who owned four cows and had 'two hundred of cheese' in store, worth £2.<sup>37</sup> The first specific

mention of a 'dayry hous' occurs in the inventories in 1639, and of a cheese chamber of storing cheeses in 1663, both in the houses of substantial yeomen.<sup>38</sup>

South Staffordshire had never been an important sheepkeeping region, and throughout the seventeenth century, sheep continually declined in importance. By 1720 only 31.3 per cent of the inventories recorded any sheep and the median flock size fell by half, from twenty-seven in 1560–1600 to fourteen in 1681–1720. The coalfield area was most affected by this change, and sheep, having been second only to cattle in the later sixteenth century as far as numbers of owners were concerned, fell to the lowest place, after swine and horses, in 1681–1720. For the craftsman, the cash income from wool was less important for feeding his family than the dairy products that a cow gave him. The decline of sheepkeeping was also marked on the sandy lowland soils, though not to the extent that it was on the plateau. It is remarkable that the decline of sheep-rearing in south Staffordshire coincided with a rising sheep population on the neighbouring Triassic sandstones of east Worcestershire.<sup>39</sup>

Pigs replaced sheep as the most favoured animal after cattle. In common with most other types of stock, the proportion of owners among the population dropped throughout the seventeenth century, but not nearly to the extent that characterized other stock, including cattle. The number of pig owners over the whole area dropped by a mere 9 per cent between 1601 and 1720, while the numbers of cattle owners fell by 15.6 per cent. The pig is a poor man's animal and obviously, with the increasing proportion of paupers in the community, it held its own better than the more expensive and time-consuming animals. The ease of keeping pigs also made it ideal for the part-time farmer

<sup>34</sup> LJRO prob inv. John Mitchell, Lower Penn, April 1676 (Consistory Court).

<sup>35</sup> W Pitt, *General View of the Agriculture of Staffordshire*, 1796, pp 148–9.

<sup>36</sup> LJRO prob inv. Thomas Parkhouse, Wednesbury, May 1630 (Consistory Court).

<sup>37</sup> Ibid, Thomas Whitehouse, Birchills, Walsall, 1698.

<sup>38</sup> Ibid, Francis Tomkyson, Wednesbury, 1639; Nicholas Ward, Aldridge, 1663.

<sup>39</sup> J. Yelling, 'Probate inventories and the Geography of Livestock Farming, a study of East Worcestershire, 1540–1750', *Trans IBC LI*, 1970, p 122.

who was tending to spend more of his time at the forge.

Proportionally, there were fewer ox and horse owners in south Staffordshire at the end of the seventeenth century than at the beginning. The decline in ox ownership was extreme, falling from 38.4 per cent of the recorded population in 1560–1600 to only 3.4 per cent in 1681–1720, a drop of 92.1 per cent. It is obvious that, by the early years of the eighteenth century the ox was rapidly disappearing from the scene. It was no wonder that horses were bred throughout south Staffordshire and Cannock Chase and that the horse fair at Brewood became nationally famous.

At the beginning of the century, of the metal-working group, 77.7 per cent had some cattle, 59.7 per cent had sheep and 44.7 per cent owned pigs. These figures are somewhat lower than those for the farmers' group, but they show that very few craftsmen were entirely dependent on industrial income in the early years of the century. Throughout the next hundred years, the proportions of craftsmen with stock dropped steadily and at much faster rates than for farmers, so that by 1681–1720 54.9 per cent of metal-workers had some cattle, only 25.5 per cent had sheep, and 32.5 per cent possessed pigs. It can be seen that pig ownership declined least, largely because of the animal's suitability for integration into an increasingly industrial milieu.

## VI

The mixed farming economy of south Staffordshire had been dominated, throughout the medieval period, by stock rearing. The present work shows that in the sixteenth century, cattle breeding and fattening was the major enterprise of the region, rather than the specialized and time-consuming enterprise of dairying which was beginning to rise in importance in the north-west of the county. Arable farming was at this time much less important than stock farming. It is

particularly noticeable that the relatively small group of metal-workers recorded in the probate inventories before 1600 included proportionally more cattle owners than average, for 94 per cent owned at least one cow. This evidence supports Dr Thirsk's contention that stock-rearing consumed relatively little of the farmer's time and that individuals relying mainly on stock had more opportunities to take up by employments than had arable farmers. At this period the movement of capital into the iron industry and the increasing demand for metal wares both at home and abroad made the metal crafts attractive to those wishing to supplement their incomes and increasing numbers of people must have seized this opportunity.

It is clear that as yet few craftsmen depended wholly upon industrial earnings and most practised a dual economy, owning a small forge, some livestock, and, occasionally, a few acres of arable land too. The average size of the metal-workers' herds was, however, smaller than that of the full-time farmer. The importance of farming to the whole community can be seen in that even the urban bit-and-stirrup makers of Walsall, who owned no arable land themselves, traditionally ceased work at harvest-time in order to hire themselves out to farmers as agricultural labour.<sup>40</sup>

In the seventeenth century all the evidence points towards a rapid and continuing decline in the relative importance of livestock farming in south Staffordshire, even after 1650 when an upward trend in stock-rearing could be discerned in many of the other parts of the country. In Staffordshire the relative value of stock production compared with that of crops, as revealed by the inventories, was declining, and the proportion of families owning stock was also, apparently, going down. It is likely that several factors were involved in this trend, including the adoption of convertible husbandry and the shrinking of

<sup>40</sup> S A H Burne, 'Staffordshire Quarter Sessions Rolls, IV, 1598–1603' *Staffs Hist Coll*, 1935.

the commons, but one fact that is particularly significant is that, proportionally, the metal-workers were suffering most from the decline. This suggests that agricultural and industrial occupations were becoming increasingly divorced from each other and a vista of increasing dependence on a cash income from forge products was opening up. An invidious result of this trend was an increasing helplessness in the face of falling piecework rates for metal products, and this in turn helped to depress the metal-workers from a state of relative security at the beginning of the sixteenth century to the depths of poverty

and squalor that so struck Engels in the 1830s and 1840s.<sup>41</sup>

The rise of rural domestic industry has been widely studied but the process of its decline has often been neglected, except in the most general of terms. It would be interesting to compare the changing standards of living of domestic craftsmen during the eighteenth century in areas which were becoming urbanized like the Black Country and those which remained almost wholly rural.

<sup>41</sup> F Engels, *The Condition of the Working Class in England in 1844*, 1846, trans W O Henderson and W H Chaloner, Oxford, 1958.

## Notes and Comments

### WINTER CONFERENCE, 1980

The Winter Conference was held on Saturday 6 December at the Polytechnic of Central London on the theme 'The Dissemination of Agricultural Knowledge'. As in previous years the conference was shared with the Historical Geography Research Group of the Institute of British Geographers. The trend of recent years towards larger numbers was continued, with over a hundred attending the conference. The papers were varied and interesting, and were presented as follows: Dr Joan Thirsk, 'The diffusion of agricultural knowledge in the sixteenth and seventeenth centuries'; Dr Pamela Horn, 'The contribution of the propagandist to eighteenth-century agricultural improvement'; Dr Nicholas Goddard, 'The development and influence of agricultural newspapers and periodicals, 1780-1880'; and Dr John Walton, 'The auctioneering profession and agricultural innovation in the eighteenth and nineteenth centuries'. The success of the conference was again due to the efforts made by Dr Dennis Baker and Dr Tony Phillips, and the Society extends its thanks to them.

### SPRING CONFERENCE, 1981

The Spring Conference will be held at Horncastle Residential College, Lincolnshire, 6-8 April 1981. Papers will be presented by Professor Maurice Barley,

Dr John Beckett, Dr Steve Haresign, Ms Marie Stinson, and Mr Brian Wood. Mr Rex Russell will present an introduction to the local landscape and lead the excursion into rural Lindsey. It is hoped to arrange a visit to Laxton following the conclusion of the formal conference programme. A booking form and programme is inserted into this issue of the *Review*, but any enquiries should be addressed to the Secretary.

### HISTORICAL ECOLOGY GROUP

The Historical Ecology Group of the British Ecology Society is holding its inaugural conference in Bangor, 6-8 April 1981 on the theme 'Upland Grassland Historical Ecology'. Details may be obtained from Mr Adrian Cowell, 7 Holt Coppice, Aughton Green, near Ormskirk, Lancashire.

### FUTURE CONFERENCES

Members may wish to note the provisional dates for the Winter 1981 and the Spring 1982 conferences. The former is planned for Saturday 5 December on a theme to be arranged. For the first time in the Society's history, the Spring Conference is to be held in Scotland, probably at the University of St Andrews, 29-31 March 1982.

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