From Black-Face to White-Face – An Aspect of the Agricultural Revolution in Norfolk

By SUSANNA WADE MARTINS

Abstract

This paper looks at the spread of new breeds of sheep across Norfolk in the early nineteenth century, the gradual eclipse of the native Norfolk horn breed, and the increase in the popularity of half-breds, using as its source the Michaelmas sales announcements in the local newspapers, a source which allows for the study of a wide cross section of Norfolk farms. It demonstrates the relatively short space of time which saw the demise of the Norfolk as a pure breed, and the importance of the new breeds, partly as pure bred flocks, but more significantly for providing new blood to produce fast growing, more meaty sheep when crossed with the native breed.

THAT the development of livestock breeding played a fundamental role in the eighteenth-century agricultural revolution is well known. With this the names of Bakewell, Culley and Ellman as breeders and Thomas William Coke and the Duke of Bedford as publicists are firmly linked.

Chunky, short-legged breeds of sheep, first the New Leicester and then the Southdowns, were developed. These thrived on turnips and the improved pastures fattening more quickly than the native unimproved breeds. 'Small in size, but great in value' is the apt text under the Southdown sheep on the monument erected in Holkham park to Thomas William Coke after his death in 1842.

What is less clear is how fast these new breeds spread, not only on the farms of the landlords and gentlemen agriculturalists, but among the run-of-the-mill farmers. The relative merits of Leicesters, Southdowns, and the various crosses with the local breeds were discussed by N Kent, W Marshall and A Young, as well as at the Holkham sheep shearings¹, but how

far did these new breeds penetrate farming in general? As Copus points out, the Southdowns were very much a gentleman's sheep.² Bowie describes them as implying a 'certain social status'.³ Their popularity amongst the gentry meant that their price was too high for the average farmer. Similarly, the other improved breed, the Leicester, was thought by William Marshall not to be suited to Norfolk in general, but 'may not be unfitted to the 'the paddocks of a gentleman''.⁴

freely at two years old: bear the drift, remarkably well, to Smithfield, or other distant markets; and the superior flavor of the Norfolk mutton is universally acknowledged. Therefore the Norfolk husbandmen, in their sheep,...have much to lose'; Nathaniel Kent General View of the Agriculture of Norfolk, 1796, p 102-3, 'The Norfolk farmer will never be able to substitute any other sheep, that will answer penning so well as the native sheep. The heavy Leicester has not activity enough to move over sufficient of ground to get its living'; Arthur Young, General View of the Agriculture of the County of Suffolk, 1794, p 61 'In the case of sheep,...a foreign cross is necessary; as much for the good of the farmer as the interest of the nation...The South Down and Bakewell's breed are introduced and will without doubt make their way'; Annals of Agriculture, XIX, 1793, pp 114-120 report of the Holkham sheep shearings, 'Tuesday July 17th, find the rams so uncommonly fat, that it would be in vain for them to attempt to waddle away from us; take hold of one in the open marsh and measure him...To shew the difference of shape between this sort of sheep (Leicester) and the Norfolk we need only refer to the measures of a Norfolk ram at Rougham'.

² Andrew K Copus, 'Changing markets and the development of sheep breeds in Southern England, 1750–1900' Ag Hist Rev, 37, 1989, pp 36–51.

³G G S Bowie, 'New sheep for old – changes in sheep farming in Hampshire 1792–1879', Ag Hist Rev, 35, 1987, pp 15–24.

William Marshall, op.cit. p 365.

William Marshall, The Rural Economy of Norfolk, 2 vols, 1787, vol 1 p 365, 'They (the Norfolks) may be bred and will thrive, upon heath and barren sheep walks, where nine tenths of the breeds in the kingdom would starve: they stand the fold perfectly well: fat

This paper attempts to study the spread of the new breeds in Norfolk using a relatively untapped source: the notices of farm dispersal auctions printed in the local papers. These have been used by Perry's in the study of the severity of the late nineteenth-century agricultural depression, particularly in Dorset, and by Walton when investigating the spread of mechanization. The authors of the Victoria County History's chapter on 'Agricultural Change, 1750-1875' have made detailed use of the local papers to study, not only the spread of mechanization, but also that of new livestock breeds across the county, and it is with this work that the present study is most comparable.7

The Norfolk Chronicle for the period 1790–1825, roughly the duration of the Holkham sheep shearings and the major period of the enclosure of commons and sheep walks in Norfolk8, was searched: a time during which we might expect to find the new breeds replacing the native Norfolks. Later papers were consulted for five-year intervals up to the 1860s in an attempt to pick up the emergence of the new Suffolk breed of sheep, important in the county by that date. Most sales were concentrated around Michaelmas, the traditional time for the renewal of leases, and so only the newspapers for September and October were used. All sales containing sheep were identified, and in addition, for the third year of each decade, details of all dispersal sales in these two months were noted to give an indication of the total farming picture and the proportion of farms that kept sheep.

There are several obvious problems with this source. Many of the sales took place following the death of a farmer, with the farm being run by executors until the dispersal. In many cases the farm would have been run down preceeding the sale or some of the stock sold to the incoming tenant and so only the residue was auctioned. Inevitably we are looking at the farms of a disappearing generation, rather than the innovative businesses of the young; the end rather than the beginning of the story. Sometimes the sale will only be a part sale, whilst elsewhere it is likely that, then as now, neighbouring farmers with stock or implements for sale would have put them in a local auction. Finally, again then as now, the sales particulars, especially in their more eulogistic passages, must be treated with the caution they deserve.

In spite of these problems, there are undoubted advantages. Here we have a random cross-section — albeit biased towards the older generation — of farms across the county; something which other sources cannot give us and something for which there is a great need if we are to extend our understanding of agricultural history beyond the county reports of the Board of Agriculture and accounts of the activities of the rich and famous.

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The bare bones of this story are well known from contemporary descriptions and have been summarized by Trow-Smith's book on livestock husbandry, and more recently by Ryder, Russell, and Hall and Clutton-Brock.⁹ It will only be summarized here as it affected Norfolk.

The changing importance of sheep in the county, as well as the levels of farming

⁵ Peter Perry, 'Newspaper advertisements – A source for Agricultural History', *Local History*, 9, 1970–71, pp 334–337.

⁶ J R Walton, 'Mechanisation in Agriculture', in H S A Fox and

R A Butlin, eds, Change in the Countryside, 1979.

G C Baugh and R C Hill, eds, Victoria County History, Shropshire,

⁷G C Baugh and R C Hill, eds, Victoria County History, Shropshire, IV, 1985, Agriculture 1750–1875, pp. 190–197.

⁸Michael Turner, English Parliamentary Enclosure 1980. Most of

Michael Turner, English Parliamentary Enclosure 1980. Most of Breckland was enclosed 1796–1816, p 49; 65.9 per cent of Norfolk enclosure acts were between 1793 and 1815, pp. 78–9. Mary Manning, ed, Commons in Norfolk, 1988, A quarter of a million acres of common were enclosed between 1801 and 1810, p 4.

⁹Robert Trow-Smith, A History of British Livestock Husbandry 1700-1900, 1952; N Russell, Like Engenders Like 1986; Michael Ryder, Sheep and Man, 1983; Stephen J G Hall and Juliet Clutton-Brock, Two Hundred Years of British Farm Livestock, 1989.

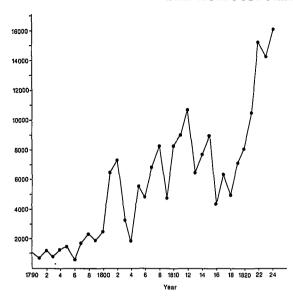


FIGURE 1 Total number of sheep listed in the sales notices

fortunes, is reflected in Figure 1 which shows the total number of sheep offered for sale in the years being considered. The gradually rising numbers of the Napoleonic years reflect the intensification of farming with the increasing prices of the period, whilst the steep rise after 1820 reflects the increasing farm sales of the depression years as more farms changed hands, and the number of sales resulting from bankruptcy and 'for the benefit of creditors' increased.

The first of the new white-faced breeds to be perfected was Bakewell's New Leicester or Dishley sheep. Work on improvement had begun before Bakewell's time, but by 1770 he was producing a distinct type which was breeding pure. Its qualities were obvious. It was quick maturing, producing plenty of meat whilst the bones remained light, thus reducing the bone-to-meat ratio. The problem was that in this short-legged, barrel-shaped animal, the quality of meat had been sacrificed to quantity. It had to be slaughtered under two years, otherwise there was too much fat. Copus has pointed

out that its increase in popularity coincides with the period when the price of tallow was also rising, and therefore fat was a valuable commodity. As the price fell, so did the popularity of the Leicester. After an initial, epidemic-like enthusiasm for the New Leicester, its true value was recognized in its ability to impart rapid and early fleshing to its progeny, and so it was the Leicester ram that was particularly valued.

Thomas William Coke, like many landowners, took an early interest in the Leicesters, buying his first ram some time before 1784 and soon advising his tenants to cross it with the native Norfolk sheep. 11 The Norfolk was a leggy, slow maturing animal, inclined to be jumpy. Its main advantages were that according to Marshall, it could thrive on barren sheep walks 'where nine tenths of the breeds of the kingdom would starve'.12 It was also prolific and produced a short fleece of fine wool. It was well adapted to the traditional Norfolk foldcourse system and because of its long legs stood up well to the walk to Smithfield or other distant markets. Its main problem was the conformation of the carcass. George Culley, a Northumbrian farmer, pupil of Bakewell and author of Observations on Livestock, described its lean carcass and nervous behaviour as more like that of a deer.13 However, if its qualities could be combined with those of the Leicester, then the resulting animal would indeed be very useful.

By the 1790s, Coke was not the only flock owner in Norfolk keeping Leicesters. At a farm sale at Great Francham Parsonage in 1792, 'A few sheep of the Leicester breed' were offered for sale¹⁴, while in 1794 '400 ewes bred from Mr Bakewell's

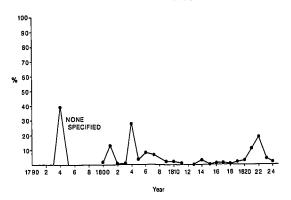
Copus, op.cit.

[&]quot;Susanna Wade Martins, 'Thomas William Coke and Livestock Breeding at Holkham', *The Ark*, xiii, 8, p 279.

¹² William Marshall, op. cit, p 365.

¹³ George Culley, Observations on Livestock, 1786, pp 139-140.

¹⁴ Norfolk Chronicle, 6 October 1792.



Percentage of sheep described as Leicesters in the sales notices

and Mr Buckling's rams' were sold at Downham Market. 15 The annual show of rams at Leicester was advertised in the Norfolk papers from 1795. In spite of Coke's promotion of the Leicesters at the early sheep shearings, the farm sales show only two of his tenants becoming breeders of them. In 1799, the Holkham tenant at Godwick farm was advertising Leicester rams to let¹⁶ and some thoroughbred ewes sold near Blickling were described as 'the breed of Mr Purdy's well-known stock'.17 Mr Purdy was the tenant of a farm at Castle Acre and a frequent contributor to and competitor at the sheep shearings. Other aristocratic or 'gentleman' breeders included Lord William Bentinck near Kings Lynn, Oylett Woodhouse, Esq, of Sedgeford, and Thomas Masters of Gaywood Hall, both in west Norfolk.

However, numbers of Leicesters kept in Norfolk were always small; advertisements showed peaks of 900 in 1801 and 1200 in 1821, but by 1807 there were always far fewer than of other breeds and they usually made up less than 10 per cent of the sheep offered for sale (Fig 2). Flocks were all below 400 ewes, and mostly well below that figure, reflecting the fact that it was replacement rams, rather than large

ewe flocks, for which there was a market. Leicester rams remained popular throughout the period studied and were frequently used for crossing. An advertisement for tups to let or sold from Packfield House, near Rougham, Suffolk stated, 'The preference so generally given to lambs produced by a cross of the Leicester tup and the Southdown and Norfolk ewe at the late fairs for sheep induce the proprietors to think these tups will merit the attention and approbation of breeders. Figure 6 shows that they were confined very much to the west of the county. None was kept on the sandy breckland soils.

Most common was the Leicester-Lincoln cross found in the extreme west of the county. It was the one that had been advocated by Culley. He claimed that it came to a marketable condition a year or eighteen months earlier than the pure Lincoln, although there was some loss in the quality of the fleece. 19 No flocks of this cross were offered for sale before 1808. In September of that year a flock of 560 was sold at Mintlynn on the Norfolk fen edge. They were described as 'kind feeders with a good quantity of wool'.20 Within the next six years two similar flocks were sold off, and in the four years following the end of the Napoleonic wars five flocks were sold, all within a very restricted area of west Norfolk.

The Leicester was also being crossed with the Norfolk and Southdown and examples of these two crosses are to be found in the sales particulars. Leicester–Southdowns were advertised at Hethersett near Norwich in 1797.²¹ In 1802, half-bred Leicester–Norfolk lambs 'by the most approved Leicester tups' were advertised for sale at the extensive lightland west–Norfolk farm of East Barsham. This cross seems to have been most popular in the

¹⁵ Ibid, 7 September 1794.

¹⁶ Ibid, 7 September 1799.

¹⁷ Ibid, 14 September 1799.

¹⁸ Ibid, 14 September 1805.

¹⁹ George Culley, Observations on Livestock, 1807, p 112.

²⁰ Norf Chron, 17 September 1808.

²¹ Ibid, 7 October 1797.

first ten years of the nineteenth century, but to have tailed off thereafter. 'Southdown crosses', on the other hand, came on the market more between 1810 and 1825.

The work of improving the Southdown is credited to John Ellman of Glynde, although his main contribution was probably that of publicizing the work of several Sussex breeders.²² By careful selection, a short-legged heavy animal was produced which retained the qualities of fine, well flavoured meat and valuable wool. Wethers could be fattened up for sale within eighteen months. Arthur Young first saw the sheep in 1780 and did much to publicize its properties. A flock was brought to Norfolk by Mr Macro in 1789-90, and then sold to Houghton.²³ Six Southdown ram lambs were advertised for sale by a Norwich dealer in 1790. According to the announcement, 'They are very valuable to put to Norfolk ewes and will not fail to improve greatly the breed of this county'.24

In 1792, Coke bought his first Southdowns and for thirteen years kept both Southdowns and Leicesters to compare their qualities both as pure stock and for crossing. In 1806 he came to the conclusion that Southdowns were in fact, better and sold his Leicester sheep.²⁵ By 1811 prizes for Leicesters were discontinued at the sheep shearings, and their popularity was also declining across the county. Gradually the Southdowns gained ground, both as a pure-bred sheep and for crossing, and huge flocks of over 700 sheep were kept. Some flocks that came on the market had been directly purchased in Sussex, and Sussex sheep fairs were advertised in the paper. Others derived either from Coke's 'famous flock' or from

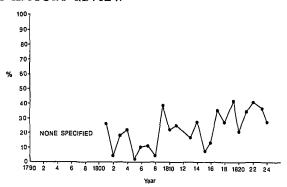


FIGURE 3 Percentage of sheep described as Southdowns in the sales notices

those of his tenants. In the early years of the nineteenth century, Southdowns were limited to the west of the county with the largest flocks on the sandy brecklands (Fig 7), suggesting that they could adapt to the poorer conditions there. After 1810, they gradually spread across into all the sheeprearing areas. It would not be true to say that they were exclusively concentrated on Holkham or were primarily on the farms of Holkham tenants, although some certainly were breeders. Several are clustered around the Holkham-owned parish of Castle Acre, near Swaffham, between Norwich and Kings Lynn. The timing of their introduction does suggest that the publicity provided by the sheep shearings was influential in their spread. Between 1810 and 1820, about thirty flocks of Southdowns of over 100 sheep and several of over 700 came up for sale. A flock of nearly 2000, including 581 lambs, was sold at a breckland farm at West Tofts in 1823.26 In 1819 and 1822 over 40 per cent of sheep offered for sale were classed as Southdowns (Fig 3). The total peaked in the depression year of high sales in 1822 when nearly 6500 sheep changed hands.

A sheep with a very brief period of popularity was the Merino. Imported from Spain, it was the prime fleece-

²² Trow-Smith, op. cit, p 128.

²³ Arthur Young, Annals of Agriculture, XIII, 1790, p 162, and XV, 1791, pp 305-6.
24 Norf Chron, 25 September 1790.

²⁵ R A C Parker, Coke of Norfolk, 1975, p 120.

²⁶ Norf Chron, 27 September 1823.

producing breed, and various attempts were made to cross it with English breeds to improve their fleeces. Coke had imported some by 1805, when they were let at the Holkham sheep shearings. He experimented with them until 1811, when he abandoned the scheme. It was between 1809 and 1814, that they found their way through to dispersal sales. There was a small flock at Felthorpe, and in 1810 some rams were sold in the castle ditches at Norwich market.²⁷ An advertisement for the sale of Merino rams 'just landed direct from Spain', at Long Ashton, near Bristol, appeared in the Norfolk Chronicle in 1810.²⁸ As well as the pure flock at Felthorpe, Merinos crossed with Norfolks were sold at Northrepps (1811)29, with Leicesters at Weston Longville (1814),30 and with Southdowns at Felthorpe (1810).31 Interest however was short-lived and none was offered for sale after 1814.

Pure-bred sheep were very much the preserve of the large-scale gentlemen farmers and it was the many varieties of half-breds which were playing an increasingly important role in the market. As Copus points out, the smaller farmers could only afford to buy an 'improved' ram and then use it on their own stock in an effort to upgrade it. He published a diagram which shows the effect of the Southdown on the many south country breeds to produce the various down sheep, such as the Oxford, Dorset, Wiltshire, and Hampshire.³² His article deals specifically with southern Britain, and so does not include the equally important Norfolk-Southdown cross which produced the Suffolk, one of the most influential breeds of the last 100 years.

Many different crosses are mentioned in the sales particulars, but frustratingly,

FIGURE 4
Percentage of sheep described as half-breds in the sales notices

in most early instances the specific cross is not given. The first record of 'half-breds' being offered for sale is in 1797³³, but it is not until the 1800s that the breeds of sheep being crossed are given. We have already seen that in the early years it was a Leicester ram that was being used on Norfolks and Southdowns, whilst after 1805, Southdown rams become increasingly popular.

That the resulting half-breds were used for breeding and not just for slaughter is indicated by the phrase, 'half-bred stock ewes', used in an advertisement for a sale at East Winch near Kings Lynn in 1806.³⁴ A flock to be sold on a dry chalkland west-Norfolk farm at Ringstead in 1818 was described as '40 half-bred Norfolk and Southdown ewes tupped by a Leicester tup'.³⁵

Rising from nothing, the half-breds soon dominated the market, reaching above 50 per cent after 1816 (Fig 4). The map for 1820–24 shows them distributed across all the sheep keeping areas of the county, avoiding only the extreme east of the Norfolk Broads and the heavy claylands of parts of the south. (Fig 9).

Of the various crosses that were tried, it was the Southdown-cross-Norfolk, first

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²⁷ *Ibid*, 8 September 1810.

²⁸ Ibid, 1 September 1810.

²⁹ *Ibid*, 28 September 1811.

³⁰ Ibid, 15 October 1814.

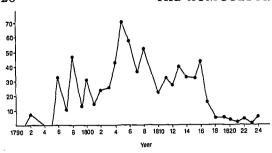
³¹ Ibid, 8 September 1810.

³² Copus, op. cit. p. 48.

³³ Norf Chron, 7 October 1797.

³⁴ Ibid, 6 September 1806.

³⁵ Ibid, 3 October 1818.



Percentage of sheep described as Norfolks in the sales notices

recorded as happening accidentally on Arthur Young's Suffolk farm in 1786, that was to be the most successful.36 He was so impressed by the result that he continued the experiment, and by 1791 had 350 'Southdown cross Norfolk' ewes. Ewes of this cross did not filter through to dispersal sales in Norfolk until the period 1805–9 when three flocks were advertised. Between 1810 and 1814, the figure rose to sixteen, making it by far the most popular. In 1812 a flock of sheep from Morley Hall, near Wymondham was described as 'Norfolk Down',37 but this name does not occur elsewhere. Instead, by 1845, the term 'black-face', to described the Norfolk-Southdown cross came into use, and by the 1860s it had become recognized as the Suffolk.

II

The most obvious trend of the period 1790–1825 is the decline in the number of pure black-faced Norfolk sheep for sale (Fig 5). The breed was frequently condemned by the commentators of the time, one of the most vehement being Arthur Young. In spite of his interest in the Southdown cross, he claimed to be a supporter of pure breeds only, particularly the Southdown. In 1804 he wrote, 'When will the flock masters of this celebrated

³⁶ Young, Annals of Agriculture, VI, 1756, p 476 and XIX, 1793, p 89. ³⁷ Norf Chron, 26 September 1812.

county adopt the whole blood (Southdown) instead of only a cross. The Norfolk sheep are confessedly falling into a well-merited disgrace'.³⁸ In this belief, the evidence of the sale advertisements suggests that Young was a little premature.

The importance of open heath grazing, where the grass was not over-lush, to the production of good fleeces which was recognized by Bakewell, Culley, and Ellman, was appreciated as far as the Norfolk sheep were concerned. In its natural environment, the sandy heaths, the Norfolk's fleece was, according to Young, the third most prized in England, the finest part, around the neck being 'equal to none'.39 The importance of poor grazing to a good fleece is shown in an advertisement for sheep at Garboldisham on the edge of Breckland in the south of the county, offered for sale in 1790, 'The sheep walk is particularly dry and sandy and the fleece particularly fine',40 That it was primarily a sheep of open rather than enclosed countryside is indicated in the notice for the sale of a flock from Pockthorpe near Norwich in 1800: 140 Norfolk sheep were to be sold 'on account of the enclosing of Mousehold heath'.41

The fact remains that the Norfolk was still prized for the quality of its meat which graced the tables of the discerning. Perhaps because of this, stubborn efforts were made to improve the breed. Coke, who in spite of his encouragement of the Southdown, ate only Norfolks, offered a prize of 50 guineas at the sheep shearings for a Norfolk ram. This was more than any other premium offered, in an effort to encourage entries in order to obtain the sight and knowledge of a good Norfolk sheep if such a one can be produced. However, there were several years when

³⁸ Arthur Young, General View of the Agriculture of Norfolk, 1804,

p 448.
39 Young, Annals of Agriculture, XLII, 1804 p 538.

⁴º Norf Chron, 4 September 1790.

⁺ Ibid, 4 October 1800.

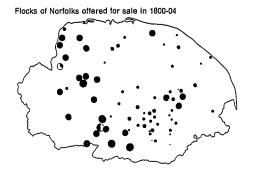
⁴² Marshall, Rural Economy of Norfolk, 1, p 365.

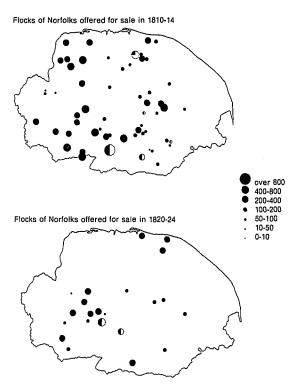
the prize was not awarded. Another reason for the long survival of so many flocks against all the odds was perhaps the one voiced by William Marshall when warning against the craze for half-breds: 'A valuable breed of stock, adapted to a given soil and situation, is the aquisition of ages; but let their superior excellences be what they may, a few years are sufficient to lose them, perhaps irretrievably'.⁴³

Even remembering that dispersal sales, particularly of the stock of deceased farmers, indicate the end, rather than the beginning of a phase, the decline in Norfolks was a slow one. However, the trade in Norfolk rams had almost ceased by 1825. Those huge flocks of Norfolk ewes that were still coming on the market were being served by Southdown, or less usually, Leicester rams.

The gradual decline of the Norfolks can be seen through the evidence of the sales. The ten years 1790–1800 was a period of low sales and therefore the sample is small. The breed of very few flocks is specified. A large flock of Leicesters was sold at Downham Market, a flock of half-breds at Gayton and Leicester-cross-Southdown at Hethersett. Otherwise we can assume that all the sheep were Norfolk. Very few sheep were kept in the east and all flocks of over 100 were in the west (Fig 6).

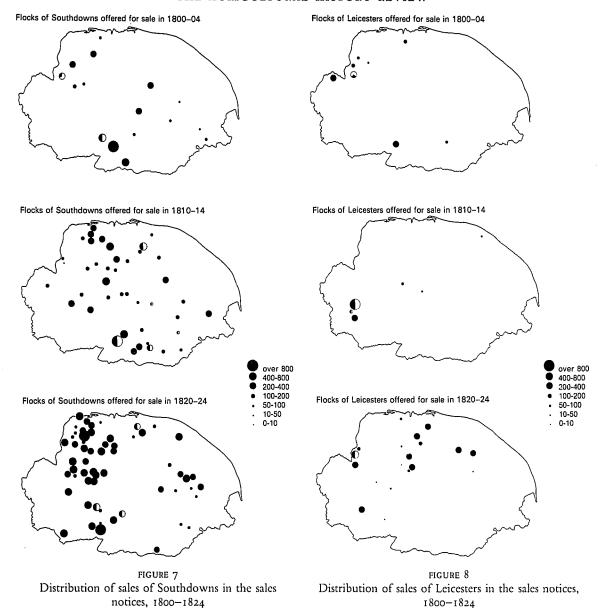
The number of sales increased in the 1800s and so there is a larger sample to consider. The number of other breeds, particularly Southdowns increased, but there was also a significant number of Leicesters (Figs 7 & 8). Between 1800 and 1804, just over twenty Norfolk flocks of over 100 sheep were sold, three of which contained more than 300 sheep. There were two main areas where these larger flocks were concentrated. As we might expect, there was a group in the poor sandy soils of Breckland, in Little Cres-





PIGURE 6
Distribution of sales of Norfolks in the sales notices, 1800–1824

singham, Tottington, Wretham, and West Tofts. There were other large flocks in the light soils of north-west Norfolk, another important sheep area, and also three around Norwich (Fig 6). But Southdowns are also found in Breckland (Fig 7). The two breeds were not mutually exclusive and Southdowns appear to have adapted to the light soils which were supposed to be so suited to the Norfolk. The same

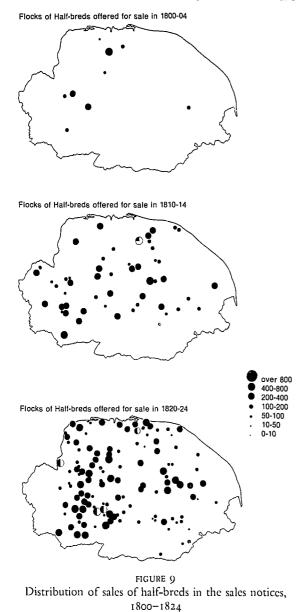


trends continue through to 1809. All large flocks of Norfolks were in the west of the county with three of over 700 sheep in Breckland or on the breck edge. Although the number of pure Southdowns for sale is down between 1805 and 1809, the number of half-breds was up (Fig 9). Norfolks still accounted for more than 20 per cent of the market.

There was still a good scatter of often large flocks of Norfolks in the area west

of Norwich between 1810 and 1814. Again there were concentrations in the north-west and around Breckland, but not to the exclusion of Southdowns. There was, not surprisingly, a concentration of Southdowns inland from Holkham on the north coast. Numbers of Norfolks for sale still remained over 20 per cent.

It is after 1815 that the dramatic decline of Norfolks set in. By 1818 the figure had dropped to 5 per cent of the market, and



never again rose above that level. Flocks remained centred in the north-west and in Breckland.

After 1820, there were far fewer pure Norfolk flocks than earlier and even fewer with rams. An example from Methwold, on the edge of Breckland, sold in 1821 will serve as a typical example of the mixed flocks now found. It consisted of 140 prime stock ewes, 80 half-bred Nor-

folk and Down ewes, 30 crones, 190 halfbred ewe and wether lambs, 3 Southdown rams and I Leicester ram.44 In the final year of this study, 1824, no Norfolk rams were offered for sale, but four flocks of breeding ewes, described for the first time with the prefix, 'real', or 'true-bred' with Leicester tups, were put on the market. The largest of these flocks consisted of 270 'superior real Norfolk ewes', and was sold at Narborough on the light soils of the Breckland edge, 45 In fact the distribution map for 1820-24 shows a group of flocks around the edge of Breckland as well as a scatter elsewhere but they had completely disappeared from the north-west of the county (Fig 6).

Pure-bred Southdown flocks were generally in the west of the county, with some huge flocks of over 1000 sheep in Breckland and in the light soils around Docking. There was a clear preference for the light soil belt which stretches northsouth across the west of the county: the area traditionally associated with sheep production. Although the Leicester flocks have a slightly broader spread into the north-east (Fig 7) they were fewer and smaller. These few flocks were enough to produce the replacement rams required by the farmers of the county.

It was the half-breds (Fig 9) which showed an enormous increase in popularity. The fact that the flocks were not as large as the largest of the Southdowns suggests that they were more popular with the average mixed farmer than the great flock masters. Their spread too is much wider than that of pure breeds, penetrating areas in the east not usually regarded as sheep country. The creation of the half-breds would not have been possible without the existence of the pure-bred flocks, and so their importance is far more broad-

⁴⁴ Norf Chron, 2 September 1820. 45 Ibid, 4 September 1824.

based than their distribution on its own might suggest.

III

Over the period covered, roughly equal to a generation, we can see the replacement of one breed, the local Norfolk, by another pure breed, the Southdown, across the main sheep keeping areas of the county. Of increasing numerical importance however, were the half-breds, the Southdown-cross-Norfolk becoming the most popular. The distribution and timing of the increase in Southdowns coincided with the sheep shearings which suggests that Holkham was in fact influential in the promotion of this breed. There are areas where Norfolks Southdowns were kept side by side, and even in its final years, the Norfolk was not, as we might expect, confined to Breckland, but was found in the northern corner of north-west Norfolk as well as in a few other locations. The story of its decline is not a simple one. It was certainly still popular, particularly where open heath remained into the nineteenth century, and was not in decline in the eighteenth as Holderness and Mingay suggest. 46 Its final stronghold was the infertile sandling region of the Suffolk coast, and it was from here that pure stock for crossing was being bought by the 1850s. Whilst many of the flocks of purebred Southdown and Leicester were to be found on the farms of well-to-do farmers and large-scale flock masters, their importance was not confined to this group of farms. The distribution of these flocks may seem rather sparse on the maps, but their real role was in providing the blood for 'improving' the local breeds, and the rise of the half-bred is spectacularly shown in the graphs and on the maps. By 1825, they were found across all the sheepkeeping areas of the county on large and small farms alike. The word 'improving' in this context means producing a meat breed which fattened quickly. This could best and most cheaply be achieved by the half-bred sheep, and the Suffolk was to become one of the most popular British lowland breeds.

In this particular and significant aspect of the 'agricultural revolution' an almost complete break with the past was made over the working lives of one generation of farmers. Valuable and detailed information about a cross-section of farmers is available through the sales notices in the columns of local papers. Through them, it has been possible to piece together the gradual change in the breeds of sheep kept across the county in a way no other source will allow. It has enabled the detailed study of a crucial stage of one of the improvements that made up the 'Agricultural Revolution'.

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⁴⁶ G E Mingay, ed, The Agrarian History of England and Wales, vol VI 1750–1850 1989, p 322, and B A Holderness in J Thirsk, ed, Agrarian History of England and Wales, 1640–1750, vol v, part 2, 1985 p 229.