

The Changing Distribution of Breeds of Sheep in Scotland, 1795-1965

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NUMEROUS publications have appeared since the late eighteenth century which deal in whole or part with breeds of sheep in Scotland. Most of these studies, however, have been limited to a short time period or particular breeds or parts of Scotland, and none include maps of the distribution of breeds. The main purpose of this paper is to synthesize information gathered from these already published accounts together with data gathered by field study to provide a comprehensive picture of the changing areal distributions of the main breeds and crosses in Scotland from 1795 to 1965. Maps are presented which show the distributions at or about 1795, 1840, 1870, and 1965, and the main factors causing changes between these dates are examined. It is hoped that this overview will be a useful summary in itself, and that it will stimulate further research into the factors responsible for the distributions of breeds at particular times and places.

The *First*¹ and *Second*² *Statistical Accounts* provided the basis for maps of the distributions about 1795 and 1840 respectively (Figs. 1 and 2).³ A series of county reports in the *Transactions of the Highland and Agricultural Society* provided sufficient information to show the distribution of breeds about 1870 (Fig. 3). Perhaps unexpectedly, little published information concerning distribution of breeds has appeared since the late nineteenth century. The most recent map, that for 1965, is based therefore on material gathered by personal interview with livestock auctioneers, farmers, agricultural

¹ Sir John Sinclair, *The Statistical Account of Scotland*, Edinburgh, 1791-9.

² *The New Statistical Account of Scotland*, Edinburgh, 1845.

³ The breeds of sheep are not stated for some parishes in the *Statistical Accounts*, but usually they could be inferred from ancillary information such as the type and price of wool, the value of sheep, systems of management, and data concerning nearby areas.

advisers, and breed societies throughout Scotland (Fig. 5). The Department of Agriculture and Fisheries for Scotland kindly provided unpublished statistics on the distribution of hill breeds (Figs. 4 and 5A). These and other sources were used to explain the changes between the four dates. Throughout the study only the distribution of breeds of permanent stocks is considered. As used here, permanent stocks are sheep kept on a farm for one or more years, and comprise mainly breeding stocks of ewes and rams, young replacements for them, and wethers. This definition excludes lambs bred on farms for disposal at less than one year of age, most sheep purchased for fattening, and sheep on farms for wintering.

DISTRIBUTION OF BREEDS CIRCA 1795

Breeds

There were two main breeds of sheep in Scotland in 1795, the Blackface and the Cheviot (Fig. 1).⁴ The Blackface, also known as the Linton, Tweeddale, Lammermoor, Galloway, Annandale, and Forest breed, and sometimes referred to as the short sheep, was characterized by a black or black-and-white (brooked or bruiket) face and legs, a short, compact body, a coarse, loose and middle-length fleece, curled horns, and a lively nature. The Cheviot, more commonly known at the time as the white-faced breed or the long hill sheep of the eastern Border, was first described in 1792 as follows:

Their legs are of a length to fit them for travelling, and to enable them to pass over

⁴ The Blackface and Cheviot breeds of today differ from those of the past, but the modern types are easy to identify from illustrations of them as they were in 1795. See, for example, T. Johnston, *General View of the Agriculture of the County of Selkirk*, 1794, Plates 1 and 2. There were also variations amongst each breed, but these were minor compared with the differences between Blackface and Cheviot.

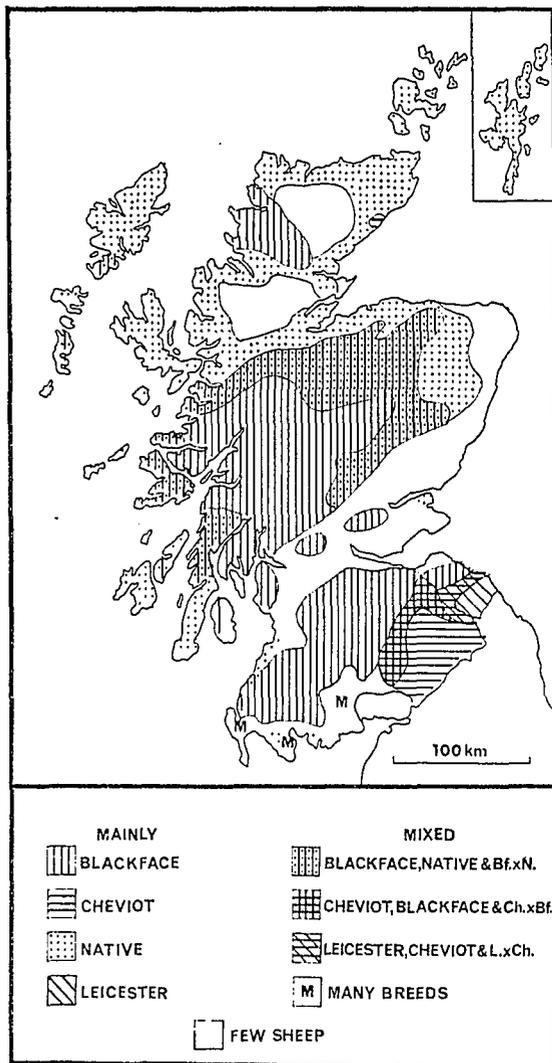


FIG. 1. Distribution of breeds, 1795.

bogs and snows, . . . They are polled, white faced, and have rarely any black spots on any part of their body.⁵

Also in sharp contrast to the Blackface, the Cheviot had a short, close fleece of fine wool.

The origin and early development of these two breeds are not known with any degree of certainty, but it appears likely that the Blackface was introduced to the central Southern Uplands from the Pennines, and the Cheviot

⁵ Sir John Sinclair, *Observations on the Different Breeds of Sheep in Some of the Principal Counties of England*, Edinburgh, 1792, p. 66.

was developed on hills of the same name from the Dunface, and was further improved in the middle of the eighteenth century by crossing with Leicester and Lincoln rams.⁶

The native breeds were so termed because from time immemorial they had existed in the localities where they were found in 1795, whereas both the Blackface and Cheviot were considered of relatively recent and English origin. Considerable variation existed amongst the native breeds, especially regarding colouring, but all varieties were small, and generally the wool was fine.⁷

Of least importance in terms of numbers, but of great significance to the future development of sheep breeding in Scotland, was the new Leicester, a large, white-faced and long-wooled breed, which had only recently been introduced to the eastern Borders from England.

Distribution of Sheep

The greatest concentrations of sheep in Scotland in 1795 were on the Southern Uplands and central to western parts of the Highlands, which supported the Blackface and Cheviot breeds (Fig. 1). In the northern and eastern Highlands and on the Islands native breeds prevailed, but stocking densities were generally low. The native breeds were not hardy enough to survive on rough grazings in winter, and, indeed, were usually housed at night even during the summer, so the hills and moorlands were almost devoid of sheep. The main exceptions were Orkney and Shetland, where numerous native sheep were left to wander at will on the moors and coasts throughout the year.

Even fewer sheep were kept on the Lowlands extending from central Ayr north-eastwards to Banff (Fig. 1). This area was undergoing improvements, and sheep were not popular because they were destructive to young hedges, trees, and sown grass, problems made

⁶ M. L. Ryder, 'The Evolution of Scottish Breeds of Sheep', *Scottish Studies*, 12, 11, 1968, p. 159.

⁷ J. A. S. Watson, 'The Rise and Development of the Sheep Industry in the Highlands and North of Scotland', *Trans. High. Agric. Soc.*, 5th ser., 44, 1932, p. 5.

more acute by the fact that sheep were allowed to wander at large after harvest.

Distribution by Breed

The spread of Blackface sheep from the Southern Uplands to the central and west Highlands during the second half of the eighteenth century has been examined by Watson.⁸ It is sufficient to note here that apparently no close study was made at the time as to whether the Blackface was the best breed for these areas. The native breeds it replaced might have been equally suitable if properly managed and bred, but no sustained efforts were made to improve them. The farmers who introduced hill sheep farming to the Highlands before 1790 were mostly from south-west Scotland, and they naturally favoured their proven hill breed, the Blackface. Moreover, the Cheviot breed was virtually unknown outside the east Borders when the Highlands were first stocked, and therefore it was never considered as an alternative.⁹ Establishment of the Blackface on the hills of the central and west Highlands occurred very rapidly because previously the emphasis had been on black cattle, and, except for partial use as summer grazings, the hills were not pastured. Penetration of the eastern Grampians and Upland districts to the north-east was slower, however, because the Blackface had to displace considerable numbers of native sheep. This was done either by gradually crossing-in with the Blackface or by completely replacing the native breed. Both these processes were taking place in 1795 (Fig. 1).

Elsewhere in the Highlands and Islands native breeds still prevailed, except on the border of Sutherland and Ross, where first Sir John Lockhart Ross, and then several sheep farmers from Ayr, Dumfries, and Perth, had introduced the Blackface breed.¹⁰ A mixture of Blackface and native sheep and crosses between them were found on Mull and Ardnamurchan, but even in

Galloway, Ayr, and Fife a few distinct flocks of native sheep still existed (Fig. 1).

The Cheviot breed was concentrated mainly in its place of origin, but even before 1795 it had been gaining at the expense of the Blackface in Dumfries, Selkirk, Peebles, and Berwick, particularly at lower elevations and on grassy hills. When changing stocks, most farmers crossed and recrossed Blackface ewes with Cheviot rams purchased from the Cheviot Hills until a "pure" Cheviot resulted, and in 1795 many stocks were still in the transition stage. This early expansion of the Cheviot was mainly due to the fact that prices for Cheviot wool were two to three times those generally given for Blackface wool. Some Yorkshire dealers, however, were still offering equal or greater amounts for the coarse wool of the Blackface, and they were even advising farmers not to change from Blackface to Cheviot stocks.¹¹ There were few sizeable flocks of Cheviots outside south Scotland, although the flock Sir John Sinclair introduced to his estate at Langwell in Caithness is noteworthy because his main intent was to dispel the generally held belief that the Cheviot breed could not survive in the Highlands.¹²

Various breeds and crosses of sheep were being experimented with in the lower parts of Galloway and Dumfries, including the native, Merino, Shetland, Mug, Blackface, Cheviot, and Leicester breeds, but there were relatively few sheep in total, and no one breed predominated (Fig. 1). The new Leicester had been found to answer well in the Merse, and on the surrounding Uplands there was a mixture of Leicesters, Cheviots, crosses between them, and Blackfaces.

CHANGING DISTRIBUTIONS, 1795 TO 1840

During the period 1795 to 1840, hill sheep farming based on the Blackface and Cheviot breeds was introduced to the north mainland and western islands of Scotland where native breeds had prevailed in 1795 (Figs. 1 and 2). By 1840 the native breeds were still predominant only on Orkney, Shetland, the Uists, Barra,

⁸ *Ibid.*, pp. 5-9.

⁹ *Plan submitted to the Public by the Society for the Improvement of British Wool*, Edinburgh, 1791, p. 5.

¹⁰ Sir George S. Mackenzie, *General View of the Counties of Ross and Cromarty*, 1810, pp. 126-30.

¹¹ Sinclair, 1792, *op. cit.*, p. 18. ¹² *Ibid.*, pp. 57-8.

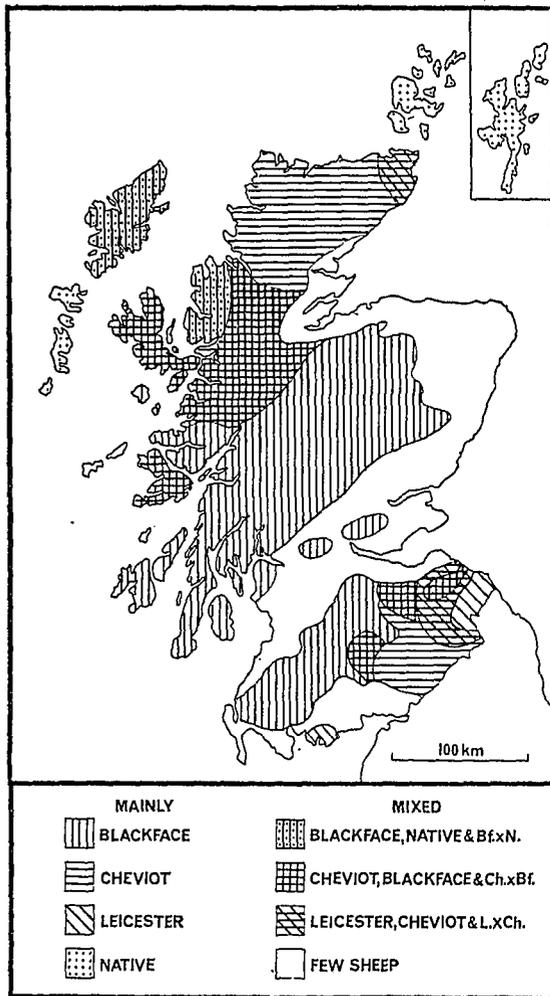


FIG. 2. Distribution of breeds, 1840.

and Benbecula. The Blackface was introduced first to all parts of the Highlands and Islands except Caithness, and by 1840 it was the main, and in many cases the only, breed in the western Highlands and Islands as far north as the Great Glen. In addition, it shared Lewis and Harris and Wester Ross in pure or crossed form with native breeds.

The Cheviot, however, gained most ground during this period. It was grazed almost to the exclusion of other breeds in the higher parts of Roxburgh, in Dumfries except Nithsdale and parts of Annandale, in Selkirk except the higher parts of Ettrick Forest, and in central Peebles (Fig. 2). Both Cheviot and Blackface stocks were kept on the Moorfoot and Lam-

mermoor hills and in the upper parts of Lanark, but the Cheviot was rapidly gaining. The Cheviot had also been spread throughout Caithness, and it predominated in Sutherland and the northern parts of Ross and Cromarty. Central Ross and north-western Inverness, including Skye, supported approximately equal numbers of Cheviot and Blackface sheep, but as in the Southern Uplands Cheviot were replacing Blackface stocks.

There were several reasons for this rapid advance of the Cheviot breed. First, as with the Blackface elsewhere, it was the first hill breed to be introduced to Caithness, and therefore met little opposition, especially after most of the native sheep, the Kerries (or Keeries) were killed by scab and rot in 1806-7.¹³ More important, however, were high prices for Cheviot wool, especially during the Napoleonic Wars when imports of fine wool were excluded from Britain. This gave the Cheviot a great advantage over the Blackface, which itself had benefited earlier when an emphasis on size and weight of carcase had helped it displace the finer woolled native breeds. Close observers pointed out, however, that the Cheviot was best suited for lower, drier, and grassier hills, and the Blackface was still better for higher and harsher environments.¹⁴

It is probable that even fewer sheep were bred on the Lowlands of Scotland in 1840 than 1795 because of the incompatibility of sheep and improvements, which by 1840 had spread into or become intensified in south-west Scotland, Aberdeen, and along the Moray Firth. A preference for cattle, especially in north-east Scotland, also contributed to the lack of low-ground sheep. There were, however, two main exceptions; pure-bred Leicester flocks were more common in the Merse than in 1795, and on adjacent Uplands pure and crossbred Cheviot and Leicester flocks were numerous. The same system existed on a more limited scale in parts of Caithness (Fig. 2).

¹³ Capt. John Henderson, *General View of the County of Caithness*, 1812, p. 211.

¹⁴ Henry Stephens, *The Book of the Farm*, Edinburgh, 1852, pt I, pp. 228, 601; pt II, p. 721.

Both ewe and wether stocks were maintained in most hill areas, but ewes far outnumbered wethers on the Southern Uplands and Argyll, while wethers predominated in the Highlands.¹⁵ On farms where mainly wethers were kept, wether lambs and hogs were purchased annually from southern markets, especially West Linton.

CHANGING DISTRIBUTIONS, 1840 TO 1870

Cheviot replaced Blackface sheep on hills and moorlands throughout most of the period 1840-70, and by 1860 they accounted for about 40 to 50 per cent of the hill sheep in Scotland.¹⁶ It must have seemed as if predictions that the Cheviot would eventually cover most of the Scottish hills¹⁷ would soon become reality. In the event, however, the decade 1860-70 marked the high point in the fortunes of the Cheviot breed (Fig. 3).

The maximum extent of Cheviots in the Southern Uplands was probably reached during the late 1850's. At that time they almost completely occupied the hills of Roxburgh, Dumfries, Selkirk, and Peebles, and they were the main breed on the Lammermoor and Moorfoots, as well as in Upper Lanark and eastern Kirkcudbright.¹⁸ But several severe winters, particularly that of 1859-60 showed that the Cheviot had been extended beyond its practical limits. These winters took a heavy toll throughout the Southern Uplands, but the Cheviot suffered far more than the Blackface.¹⁹ Contributing to this difference was the fact that the Cheviot had lost some of its earlier hardiness. Hill farmers took quick action, and many who had only recently converted to Cheviots returned to Blackfaces. By 1870, the Blackface had been restored to Lanark, eastern Kirkcudbright, and Nithsdale in Dumfries, and

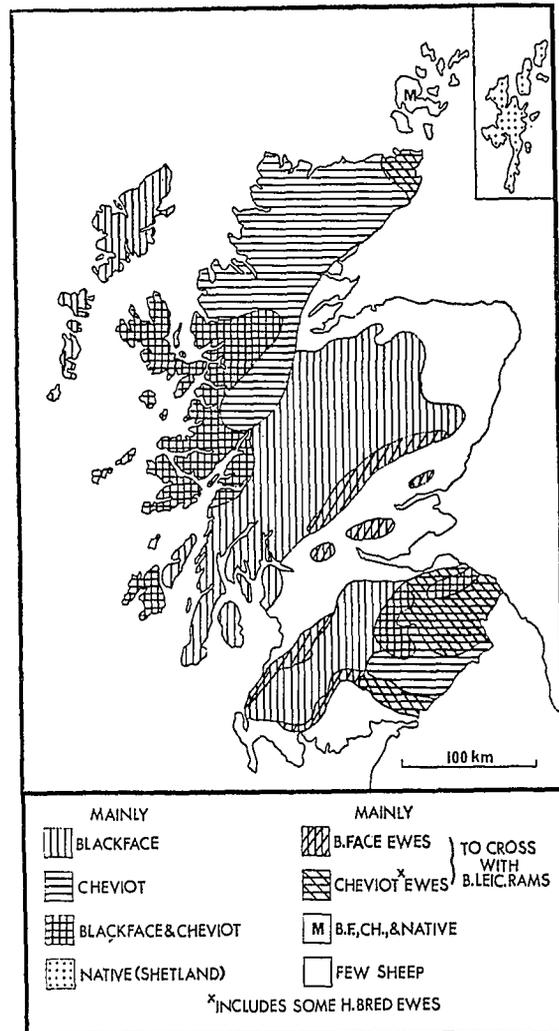


FIG. 3. Distribution of breeds, 1870.

they were gaining back lost ground in Peebles, Ettrick Forest, and on the Moorfoot and Lammermoor hills (Fig. 3).

Cheviots probably reached their greatest numbers and extent in the Highlands and Islands about 1870 (Fig. 3). By then they had gained almost complete control of the hills of Caithness, Sutherland, northern Ross, and parts of Inverness. They were almost equal in number to Blackface sheep on the west mainland from Oban to Loch Torridon, and on Islay, Mull, Tiree, Skye, Orkney, and Shetland. Considerable numbers were also present on the Uists and Lewis and Harris, but there the

¹⁵ W. Youatt, *Sheep*, 1837, p. 293.

¹⁶ Watson, *loc. cit.*, pp. 11-12.

¹⁷ For example, see Youatt, *op. cit.*, p. 288.

¹⁸ D. Archibald, 'On the Cheviot Breed of Sheep', *Trans. High. Agric. Soc.*, 4th ser. 12, 1880, pp. 110-29.

¹⁹ Lawrence Anderson, 'On the Topography and Agriculture of Peebleshire', *Trans. High. Agric. Soc.*, 4th ser., 4, 1872, pp. 226-40; Peter Johnstone, 'On the Loss of Sheep in 1860', *ibid.*, 3rd ser., 9, 1861, pp. 550-3.

Blackface²⁰ still remained predominant (Fig 3).

Blackface, Cheviot, and native sheep, and crosses between them were found on Orkney and Shetland, but only on Shetland was the native breed, the Shetland, predominant (Fig. 3).

The other main development during this period was the beginning of what is now known as the vertically or altitudinally stratified and integrated system of sheep breeding in Scotland, whereby hill ewes and crosses derived from them are mated with arable rams on Upland and Lowland farms. The crossbreeding of Blackface and Cheviot ewes was practised even before 1840, but the conversion between 1840 and 1870 of much rough grazing to improved pasture and tillage on the Uplands permitted these systems to be more fully developed. Better feeding and crossbreeding with arable rams allowed the hill ewes to bear and rear more and larger lambs. Hybrid vigour in the lambs also contributed to the popularity of crossbreeding. By 1870, the breeding of Border Leicester rams, which were developed from the new Leicester, with Blackface ewes to produce Greyface lambs, was common on the margins of the western Southern Uplands, the eastern Grampians, and on the Campsie, Ochil, and Sidlaw hills. Similarly, Cheviot ewes were mated to Border Leicester rams to produce Half-bred lambs on the Uplands of the south-east, throughout Caithness, except on the highest land, and in eastern coastal districts of Ross and Inverness (Fig. 3). On better arable farms in the Merse, crossbreeding was taken a step further by mating half-bred ewes with Border Leicester rams to produce three-parts-bred lambs. The development of these systems caused the virtual disappearance of the new Leicester from Scotland, and it also resulted in very few Border Leicester flocks being kept because their only purpose was to produce rams for crossbreeding.

Outside the south-east, breeding flocks were not numerous on the Lowlands because of the

²⁰ The Blackface of Lewis and Harris then, as now, showed evidence that its ancestry included the indigenous breed of the island, the "caora beag".

relatively high prices for alternative enterprises, especially cattle and grain, and because many Lowland farmers lacked the experience or inclination to try sheep breeding. The most common type of flock on the Lowlands was one comprising draft Blackface or Cheviot ewes to cross with Border Leicester rams.

CHANGING DISTRIBUTIONS, 1870 TO 1965

Hill Breeds

Cheviots were replaced by Blackfaces on many hill farms between 1870 and 1965. Indeed, the ratio of Cheviot to Blackface sheep declined rapidly from about 1:1 in 1860-70 to 1:4 in 1915,²¹ and then more slowly to almost 1:5 in 1965.²² Many factors have contributed to this change.

Hill farmers in the Highlands did not know the limits of the breed, and when Cheviots became fashionable they were introduced into unsuitable environments. As had occurred earlier in south Scotland, several bad winters in the Highlands during the 1870's, notably that of 1878-9, convinced many farmers that the Blackface was superior to the Cheviot on high, exposed hills where little winter feed and shelter were available.

Cheviots throughout Scotland were adversely affected by imports of cheap wool. The main advantage of the Cheviot over the Blackface had always been the higher prices for Cheviot wool, and when the differential dropped because of imports of fine Merino wool from Australia, many Cheviot stocks were replaced by Blackfaces on harsher hill grazings which only favoured the Cheviot when the differential was high.

²¹ R. M'Millan, 'Blackface Sheep', *Trans. High. Agric. Soc.*, 5th ser. 27, 1915, p. 45.

²² There were some 3·91 m. ewes for breeding in Scotland in 1965, of which 2·44 m. or about 62 per cent received the Hill Sheep Subsidy. Of these hill sheep, 78 per cent were Blackface, 16 per cent Cheviot, 4 per cent Shetland, and 2 per cent other breeds. Approximately equal numbers of the remaining 1·47 m. ewes were on Upland and Lowland farms, but the number by breed could not be determined. Most of the Upland ewes, however, would be Blackface and North Country Cheviot, and these breeds, together with Half-bred and Greyface ewes, comprise the bulk of Lowland flocks.

The decline of the wether system was another contributing factor. Wool and mutton from Australia and New Zealand entered Britain in increasing amounts after 1870, and this affected wethers most because, to a greater extent than ewes and lambs, they were kept mainly for these products. The result was the conversion of millions of acres of hill sheep pasture to deer forests and grouse moors, and the removal of some 500,000 sheep, mostly Cheviot and Blackface wethers, from Highland hills between 1893 and 1937.²³ Elsewhere, however, ewes replaced wethers, and many grazings which had supported Cheviot wethers were too harsh for Cheviot ewes, so Blackface ewes were introduced.²⁴ Cheviot stocks in Ross, Inverness, and Argyll suffered most from this change.

The Blackface breeds also proved more adaptable to a change in consumer tastes from large to small joints, and from mutton to lean lamb. This development, which was already evident in the London market by the 1870's, and became widespread by the early 1900's, favoured Blackface over Cheviot stocks because, although both proved capable of producing light and lean lambs, Blackface lambs could be brought to maturity much more quickly than Cheviot lambs, and therefore provided a greater turnover.²⁵

Another factor has been the deterioration of hill grazings since extensive sheep farming was introduced. This caused or contributed to a change from Cheviot to Blackface sheep in parts of the Highlands²⁶ and eastern Borders²⁷ because the Blackface is the more hardy breed.

Finally, during and for ten years after World War II, the Government controlled fatstock marketing, and would not accept South Country Cheviot lambs for grading directly off

the hill. Some farmers in the eastern Borders therefore began breeding Blackface lambs which could be graded, and have continued with them since.²⁸

The other main event concerning hill breeds since 1870 has been the development of the North Country Cheviot as a separate breed, and its spread into south-east Scotland. The larger size and heavier fleece of the North Country compared with the South Country Cheviot,²⁹ as the smaller variety came to be called, is not fully understood. It is probably the result, however, of an emphasis in parts of north Scotland upon size, above all other characteristics, which has been promoted by breeding and management practices not used with Cheviots in south Scotland.³⁰ Other factors contributing to the development of the two types are differences in ancestry and grazings.³¹

The North Country Cheviot was confined to Caithness, Sutherland, and parts of Ross until the 1920's, when a severe outbreak of the disease scrapie amongst Cheviots on the eastern Borders led many farmers to replace or cross their flocks with the northern breed.³² Preference for the North Country Cheviot was reinforced by the fact that the Half-bred ewe it produced became more popular in south Scotland than that out of the South Country Cheviot. By the late 1940's the South Country Cheviot was threatened with extinction,³³ but

²⁸ W. B. Duthie, *Economics of Hill Farming: Blackface or Cheviot*, Edinburgh and East of Scotland College of Agriculture, 1955, p. 8.

²⁹ The South Country Cheviot flock book was started in 1891, so it can be assumed that even before this date differences between the types were considerable. See R. J. Robertson, 'The Breeding and Selection of North Country Cheviot Sheep', *Sheep Husbandry in the Scottish Borders (Low-Ground)*, Edinburgh and East of Scotland College of Agriculture, Bulletin 26, 1951, pp. 20-1.

³⁰ J. Robson, 'Cheviot Sheep: South and North country', *Trans. High. Agric. Soc.*, 5th ser., 42, 1930, p. 71; J. A. Symon, *Scottish Farming: Past and Present*, Edinburgh, 1959, p. 332.

³¹ A. H. H. Fraser, 'Cheviot Sheep', *Agriculture*, 55, 1948, pp. 277-83.

³² R. J. Robertson, 'Border Sheep', *Scot. Jour. Agric.*, 32, 1952-3, p. 13; Robson, *loc. cit.*, p. 71.

³³ G. S. Easton, 'Cheviot Hill Sheep', *Hill Sheep Husbandry in the Scottish Borders*, Edinburgh and East of Scotland College of Agriculture, Bulletin 36, 1952, p. 7.

²³ 'The Stock Carrying Capacity of Hill Grazings in Scotland', *Scot. Jour. Agric.*, 21, 1938, pp. 221-2.

²⁴ Watson, *op. cit.*, p. 12.

²⁵ A. MacNeillage, 'The Production of Early Mutton', *Trans. High. Agric. Soc.*, 5th ser., 25, 1913, pp. 209-11.

²⁶ F. Fraser Darling (ed.), *West Highland Survey*, Oxford, 1955, p. 230.

²⁷ A. R. Wannop, 'Sheep Farming in the Scottish Border Counties', in J. F. Thomas (ed.), *Sheep*, 1945, p. 132.

experience showed that the North Country breed was not well suited to the higher hills of the Borders, and therefore the South Country was reinstated on hill farms. North Country flocks, pure-bred or crossed with the Border Leicester, did, however, become common on Upland farms in south-east Scotland, Dumfries, and the Borgue area of Kirkcudbright.

Outside south Scotland the South Country Cheviot type is found mainly on small farms and crofts in western coastal districts of Ross and Inverness, and on Skye. Many of these flocks probably originated at the time of the clearances from shotts (rejects) from nearby hill farms.³⁴ The farmers and crofters had neither the land nor the capital to adopt breeding and management practices subsequently used on hill farms by breeders of North Country Cheviots, and therefore the smaller type of Cheviot was perpetuated.

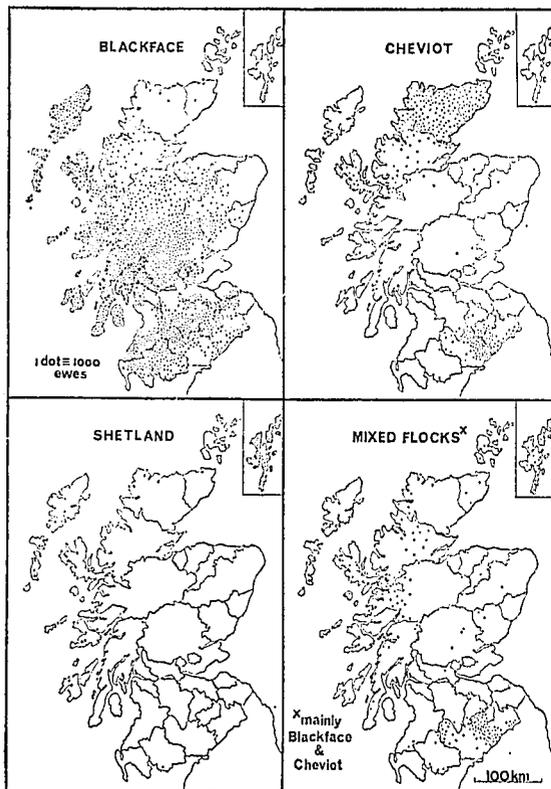


FIG. 4. Distribution of ewes in receipt of the Hill Sheep Subsidy, 1965.

³⁴ Darling, *op. cit.*, pp. 237-8.

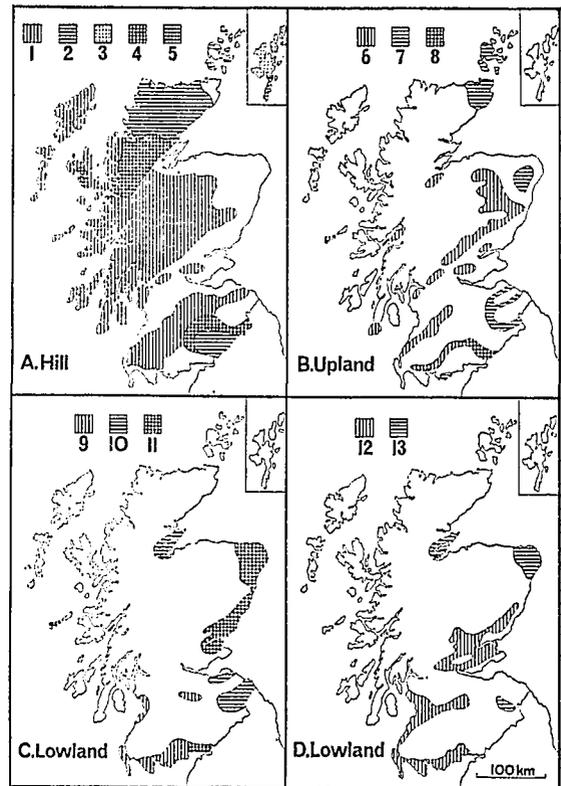


FIG. 5. Distribution of sheep breeding systems in Scotland, 1965

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>A. Pure-bred Hill and Moorland Flocks</p> <p>Mainly (over 65%)</p> <ol style="list-style-type: none"> 1. Blackface 2. Cheviot 3. Shetland <p>Mixed (35% to 65%)</p> <ol style="list-style-type: none"> 4. Blackface and Cheviot 5. Cheviot and Shetland | <p>C. Cross-bred Lowland Regular Flocks</p> <ol style="list-style-type: none"> 9. Greyface ewes 10. Half-Bred ewes 11. Greyface and Half-Bred ewes <p>All crossed with Down rams</p> |
| <p>B. Cross-bred Upland Flocks</p> <ol style="list-style-type: none"> 6. Blackface ewes 7. Cheviot ewes 8. Blackface and Cheviot ewes <p>All crossed with Border Leicester rams</p> | <p>D. Cross-bred Lowland Flying Flocks</p> <ol style="list-style-type: none"> 12. Blackface ewes crossed with Border Leicester rams 13. Cheviot ewes crossed with Border Leicester and Down rams |

In summary, forces at work over the past hundred years have produced a pattern of distribution of the Blackface and Cheviot breeds similar to that for 1840 (Figs. 2, 4, and 5A). The Blackface dominates, and in many areas is the only hill breed, throughout most of the Southern Uplands, and the central and

western Highlands and Islands (Figs. 4 and 5A). In contrast, the Cheviot has complete control only of the hills and moorlands of Caithness and Sutherland. Elsewhere it is the main breed only in parts of Wester Ross and Orkney, and the central to eastern Borders (Figs. 4 and 5A).

These patterns of distribution are difficult to explain fully. It has long been recognized that the Blackface can survive and return a profit where the Cheviot cannot, and it is true today that the harsher and higher hills, dominated by heather, peat, and acid moor, and acid grassland, support mainly Blackface sheep.³⁵ Cheviots, on the other hand, tend to be concentrated on grassy hills in south Scotland,³⁶ and on hills and moorlands dominated by cotton grass, deer grass, and sphagnum in north Scotland. Many exceptions and qualifications could be made concerning these statements, and to explain fully the distribution of each breed would require a detailed farm-to-farm survey. It would appear, however, that the patterns of distribution now and in the past are mainly the result of the relative profitability of the two breeds. The following words written in the early 1800's concerning Tweeddale (Peebles), the traditional place of origin of Blackface sheep in Scotland, is illustrative:

It remains, then, as yet, to be determined by fair experience, whether, in point of profit, the acknowledged superiority of the black-faced breed, in regard to feeding and carcase, and the less risk of death of lambs, shall surpass or equal, or come short of, the acknowledged superiority of the Cheviot breed, in regard to wool. The experiment will be completely tried; and, if successful, the change will be as completely affected: For the Tweeddale farmers are certainly as much set upon their own interest as any other class

³⁵ The distribution of vegetation was obtained from Sheet 1: *Vegetation, Ordnance Survey*, 1942, prepared by Arthur Geddes and L. Dudley Stamp.

³⁶ Some Cheviot flocks in the south-east are on heathery hills, and in recent years the Blackface has replaced the Cheviot on many grassy hills, but it is still a valid generalization to say that most Cheviot hill sheep in south Scotland are on mainly grassy hills.

of men, when, only, it is clearly ascertained to them where their interest lies.³⁷

As has been shown, many Tweeddale farms eventually were stocked with Cheviots. In recent years, many farmers on the grassy Cheviot Hills, the very home of the Cheviot breed, have reacted in a similar manner by replacing their traditional breed by Blackfaces because the latter is now more profitable (Figs. 4 and 5A). In short, farmers generally do not allow sentiment and tradition to dictate their choice of breeds or types of livestock; rather, they base their selection upon current market conditions in much the same way as other businessmen. Because of the nature of sheep breeding, however, changing from one type of stock to another takes somewhat longer, and must be done more cautiously than many other enterprises.

Upland and Lowland Breeds and Crosses

Between 1870 and 1939, except during and immediately after World War I, Britain was subject to imports of cheap grain, and as a direct result millions of acres of tillage were converted to grassland. Sheep bred especially for arable conditions declined rapidly because of this change. Longwool breeds suffered most, but pure-bred Down flocks also were given up, except for the production of rams. On the other hand, various systems of crossbreeding arable rams with grassland ewes became popular on Lowland farms in different parts of Britain. In southern England and the Midlands, for example, Welsh Mountain ewes to cross with the Border Leicester, and Clun Forest and Kerry Hill ewes to cross with Down rams became common. In parts of north-eastern England, Swaledale ewes to cross with Wensleydale or Border Leicester rams were also popular.³⁸

In Scotland the modern day vertically stratified and integrated system of sheep breeding,

³⁷ Charles Findlater, *General View of the Agriculture of the County of Peebles*, Edinburgh, 1802, p. 187.

³⁸ T. L. Bywater, 'Crossbreeding of Sheep', *J.R.A.S.E.* 106, 1945, pp. 168-71.

which had been incipient and localized before 1870, became fully developed and general. In this system, Cheviot and Blackface flocks are bred pure on the hills, and they provide surplus ewe lambs and draft ewes for crossbreeding with Border Leicester longwool rams on Upland marginal farms. This produces crossbred ewes (Half-bred and Greyface) that inherit "thrif" and milking ability from their hill mother, and increased growth rate and fertility from their longwool father. Half-bred and Greyface ewes are in turn sold to Lowland farmers who cross them with Down rams to produce early-maturing lambs with a good meat carcass. The development of this system led to an increased demand in Scotland for Cheviot, Blackface, and to a lesser extent Greyface ewes, but most popular of all, not only in Scotland but also in England, was the "Scottish" Half-bred ewe.³⁹

Cheviot and Half-bred

The crossing of Cheviot and Half-bred ewes with Border Leicester rams to produce Half-bred and three-parts-bred lambs was quite common in Upland and Lowland farms in south-east Scotland and in Caithness before 1870.

Between 1870 and 1900, the number of these flocks was increased, and flocks of "pure" Half-breds, i.e. Half-bred ewes mated with Half-bred rams, also became popular in south-east Scotland.⁴⁰ During the period 1900-15, however, pure Half-bred flocks and those producing three-parts-bred lambs went out of favour because the lambs were too heavy and slow maturing, and susceptible to scrapie. These flocks were replaced by ones in which Half-bred ewes out of a Cheviot ewe and Border Leicester ram were put to Oxford, and to a lesser extent, Suffolk Down rams.⁴¹ This system was adopted throughout the eastern arable areas of Scotland and England,

and it resulted in an increase in the number of crossbred Cheviot and Border Leicester flocks to produce Half-bred breeding replacements. The greatest increases occurred in Caithness and Aberdeen, aided by the introduction of wild white clover and basic slag, which allowed sheep numbers to rise dramatically with no decrease in cattle.⁴² Production was also intensified on the Uplands of the south-east and Dumfries. The Half-bred ewe out of the North Country Cheviot proved to be better than that out of the South Country Cheviot for producing Down-cross lambs of the type desired, and after the introduction of North Country Cheviots to south Scotland in the 1920's, the North Country Cheviot became the basis for breeding the Half-bred ewe throughout Scotland.

These developments in the Cheviot and Half-bred system had taken place by about 1940, and since then the patterns of distribution have remained much the same (Fig. 5B). The only significant changes have been a decline in the number of flocks on Lowland farms because of more profitable alternative enterprises, the increasing popularity of Suffolk at the expense of Oxford rams, and a recent trend towards crossing the Suffolk directly with Cheviot ewes, both South and North Country (Fig. 5D).

Blackface and Greyface

The breeding of Greyface lambs was extended into the uplands of Aberdeen and Banff about 1910, and soon became general there.⁴³ An increase in the carrying capacity of Upland grasslands facilitated the adoption of this system in much the same way as it did the breeding of Half-bred and Down-cross lambs on lowland farms (Fig. 5B, C). More and better grassland, and a greater acreage of forage crops, such as rape, also led to increased Greyface lamb production from flying flocks of Blackface ewes

³⁹ R. P. Askew, 'Recent Changes in Sheep Breeding in Arable Areas', *Agriculture*, 44, 1947-8, pp. 453-4; H. G. Clarke, *Commercial Sheep Management*, 1963, p. 41.

⁴⁰ Alexander Guild, 'Half Bred Sheep', *Trans. High. Agric. Soc.*, 5th ser., 9, 1897, p. 221.

⁴¹ MacNeillage, *loc. cit.*, pp. 212-14.

⁴² Sir Robert Greig, 'The Extension of Temporary Pasture in Arable Farming', *Scot. Jour. Agric.*, 14, 1931, pp. 1-3.

⁴³ M. Mackie, 'Forty Years' Farming in Aberdeenshire', *ibid.*, 26, 1946-7, p. 225.

on Upland and Lowland farms throughout southern and central Scotland (Fig. 5D).

Down-cross lambs out of Half-bred ewes far outnumbered those out of Grey-face ewes until about the mid-1950's. The Half-bred ewe owed its advantage mainly to the more uniform and heavier fat lambs it produced (50 to 60 pounds deadweight compared with 35 to 45 pounds), which were especially popular during the period of government fatstock control because payment for fat lambs was based on weight only.

Notwithstanding the appearance of the Down-cross lambs it produces, the Greyface ewe has been rising in popularity in recent years and the Half-bred ewe has been losing ground. Free-market conditions for fatstock since the mid-1950's, and a trend to lighter-weight fat lambs have favoured the Greyface. In addition, it has proved to be more hardy, and is cheaper to buy and easier to maintain than the Half-bred. For these reasons some farmers have replaced Half-bred by Greyface flocks, while others have begun crossing Cheviots directly with Down rams. The Greyface now is widely distributed in Lowland and semi-Upland areas of Scotland, and is particularly popular on farms somewhat harsher and less arable than those supporting Half-bred ewes. Similarly, Blackface ewes in flocks producing Greyface lambs (except flying flocks) tend to be on higher and less arable farms than flocks of Cheviot ewes producing Half-bred lambs (Fig. 5B, C). These patterns can be attributed to differences in hardiness and adaptability between Blackface and Cheviot hill ewes, from which Upland and Lowland flocks are ultimately derived. As with the hill breeds, however, profitability is the main determinant of what type of crossbred flock is kept, and if one system becomes more profitable than another

it soon will be adopted on any type of land.

SUMMARY

Most of Scotland is hilly moorland, and it is therefore to be expected that hill breeds of sheep are, and have long been, predominant. It is surprising, however, especially in view of the large number of local breeds elsewhere in Britain, that only two breeds, the Blackface and the Cheviot, have dominated the breed structure of Scotland for almost two hundred years. Indeed, hill sheep breeding during the period 1795-1965 can be viewed mainly as a struggle between proponents of these two breeds, which interestingly were developed into distinct types within close proximity in the Scottish-English Borderlands. The contest was begun in earnest in the late eighteenth century, and was in favour of the Cheviot until the 1860's. Thereafter, and continuing to the present, the hardier and earlier maturing Blackface has dominated. The development after 1850 of an integrated system of crossbreeding based on the Blackface and Cheviot has extended their influence to the Uplands and Lowlands, at least on the numerically more important female side. Thus, most permanent stocks of sheep throughout Scotland today comprise Blackface or Cheviot ewes, or their first crosses, the Greyface and Half-bred. Even on the ram side, the two hill breeds are most numerous, although the Border Leicester and, to a lesser extent, Down breeds are of importance. The main exception to this general pattern is that the Shetland breed and crosses from it are the main types on Shetland. These sheep are the only sizeable group of survivors of the indigeneous breeds which once were predominant in Scotland, and which were replaced without any concerted efforts having been made to improve them.