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OBSERVATIONS ON THE PRODUCTION
OF FAT LAMBS IN ANGLESEY
1952 and 1953

BY

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Price 3/-

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E. F. NASH.

INTRODUCTION

The outbreak of war in September 1939 brought about drastic changes in the farm practices of Anglesey. In the years immediately preceding 1939 the majority of the Island's farmers had developed a system of pastoral farming with the main emphasis on the production of fat cattle drawn as stores from Ireland and the hill districts of Wales, and the production of fat lambs, which were mainly first crosses of the Welsh mountain ewe and a lowland ram, the ram in most instances being Wiltshire Horn or Southdown. The area of land under crops or in fallow in 1939 was only about 11 per cent. of the total area of crops and grass. Oats with nearly 10,000 acres, was by far the most important crop, followed by turnips and swedes (1,823 acres) and potatoes (902 acres).

The population of sheep over one year* on the Island stood at 98,250 on June 4th, 1939; this represented a figure of over one sheep to every acre of permanent and temporary grass for grazing. In addition, there were 24,480 cows and other cattle over two years old and 13,363 cattle from one to two years old.**

The war-time "ploughing-up" campaign increased the area under crops from 14,647 acres in 1939 to a maximum of 51,898 acres in 1943—an increase of about 254 per cent. In 1943 the area of crops was about 39 per cent. of the total area of crops and grass. The reduced area of grass had to support considerable increases in the numbers of cattle, particularly dairy cows, as the national policy had placed first priority on milk. The population of cows and heifers in calf increased by 23 per cent. from 1939 to 1945, and other cattle over one year old increased by 10 per cent. in the same period. Sheep numbers therefore were bound to be reduced, and they fell by about 60 per cent. from 1939 to 1945 to the level of 39,048. This figure represented about 0.6 sheep to every acre of grazing.

From 1945 to 1953 the acreage of grazing land showed a steady tendency to rise and the sheep population increased to a level approaching that existing before the war. The rate at which the increase took place has accelerated rapidly since 1948, from 8 per cent. per annum to nearly 20 per cent. per annum in the last two years.

The rate of increase in the acreage of grazing during this period was less rapid than that of sheep numbers, as the acreage of crops, although far less in 1953 than in 1945, was still 68 per cent. above that of 1939. The numbers of cows and heifers in milk and in calf had increased still further by 9 per cent. from 1945 to 1953, and other cattle over one year old had increased by about 2 per cent. in the same period. In 1953 there were about 1.07 sheep to every acre of grazing in the county — a figure that was very nearly equal to the position in 1939. The position in 1953, as compared with that in June 1939, can

* The term "sheep," except where otherwise stated, relates to those over one year old.

** Full details are given in Appendix B.

therefore be summarised as follows :—

- (a) There has been an increase of 68 per cent. in the area of land under crops except grass, and a fall of about 9 per cent. in the area of both temporary and permanent grass for mowing. The acreage of grazing land has been reduced by 13 per cent., and the area of rough grazing land has shown a tendency to decline. It is significant also that the proportion of temporary grass to total grass has increased considerably, from 16 per cent. in 1939 to 32 per cent. in 1953.
- (b) The stock carrying capacity of the reduced acreage of grazing has increased considerably. Whereas in 1939 each 100 acres of grazing carried 43 cattle over one year old and 111 sheep over one year old, in 1953 the numbers were 58 and 107 respectively.

This comparison indicates that the changed position and emphasis in the farming of the county does to some extent create new problems, and these will become more apparent if the population of sheep is to be maintained at this level for some years. The prospects are that this will be so and indeed that further increases will occur. It is worth noting also that changes in the environment under which the sheep are now grazing on the Island prevent a reversal to the "ranching" methods employed before the war.

This report attempts an examination of the fat lamb industry in Anglesey. It is based on information relating to the grading of sheep supplied by the Ministry of Food, supplemented by quantitative and financial data supplied by farmers on the Island who have co-operated with the Department of Agricultural Economics during 1951-53.

The system of sheep farming in Anglesey

Generally speaking, sheep farming in Anglesey is based on the "flying flock" system, but instead of a complete replacement of ewes each year only a proportion are purchased annually, some of the ewes being kept for two or three years. The fat lambs produced are mainly sold in the year of lambing.

Draft Welsh ewes of about four or five years old are the most common on the Island, and these are purchased from the hill flocks of Caernarvonshire and Merionethshire, and even as far south as Cardiganshire and eastwards to Denbighshire. Some farms on the other hand graze either a flock of draft Kerry ewes or a mixed flock of Kerry and Welsh Mountain ewes. There are also a relatively few flocks of other breeds, Suffolks being probably the most numerous of these. It is difficult to assess accurately the importance of the different breeds of rams that are used in the Island, but it is safe to place the Wiltshire Horn as the most numerous.* Anglesey has been for a long time an important breeding centre for this breed. In 1923, when the Wiltshire Horn Sheep Society was founded, there were over 60 registered pedigree flocks on the Island. There were several lapses from

* R. Phillips & Ll. Phillips, Pedigree Breeding in Wales. Journal of the Royal Welsh Agricultural Society, 1950.

membership in the following years, but when the flock book was re-opened in 1945 the number of registered flocks again rose to 60. In 1952 nearly 300 rams from Anglesey were registered with the Society, this being an increase of 50 over the 1951 figure.* The Wiltshire Horn breed which can be traced in agricultural history for over 200 years is reputed to be particularly prepotent and to have a long life in the flock. One of the main advantages given to the breed is that owing to the fine head and neck and lightness of shoulder, parturition is relatively easy. Lambs of the cross from Wiltshire Horn are very active, and experiments carried out at University College of North Wales, Bangor, in 1901-1916**to compare the various breeds for crossing on the Welsh ewe showed that the Wiltshire ram was very satisfactory for this purpose, as it was able to transmit its rapid growth rate to its progeny. Many farmers keep a small flock of Wiltshire Horn for breeding sires for their Welsh ewe flock, and any surplus to this requirement is sold at annual sales. The Wiltshire flock is kept completely separate from the Welsh ewe flock, as the former prefers as extensive a grazing as is possible—usually two or three ewes grazing with each lot of cattle.

In addition to the Wiltshire Horn, but less extensively used for top crossing, is the Suffolk breed, which gained in popularity soon after the war. The Border-Leicester has also some following in the county and instances of using the Clun and the improved Welsh Mountain have been recorded.

The general practice is to purchase ewe replacements at the September and October draft ewe sales, and on many farms the sheep have the run of a large proportion of the pasture until February or March, when they are usually confined on a smaller acreage of better pasture over the lambing period. There is, as one would expect, some disagreement among farmers as to the merits of early or late lambing, but in the majority of cases the date for turning out the rams is dependent on when the new ewes are bought. Very little hand fed food is given to the ewes prior to lambing, but the practice of feeding high protein foods as a "steaming-up" process—a commendable practice—has been introduced on a few farms. Others reserve some ryegrass, sown under the previous year's straw crops, for grazing to the sheep in February.

A proportion of the lambs, particularly those well forward, are graded off their dams while the remainder are fattened on grass alone and sold fat when they attain a satisfactory weight. Most of the ewes that have completed their second lambing season in the county at the age of six or seven years are graded in the autumn. These again are fattened on grass; hand feeding is rare. Only about 2 per cent. of the breeding flock consists of shearlings and ewe hogs—all the other lambs are sold off fat.

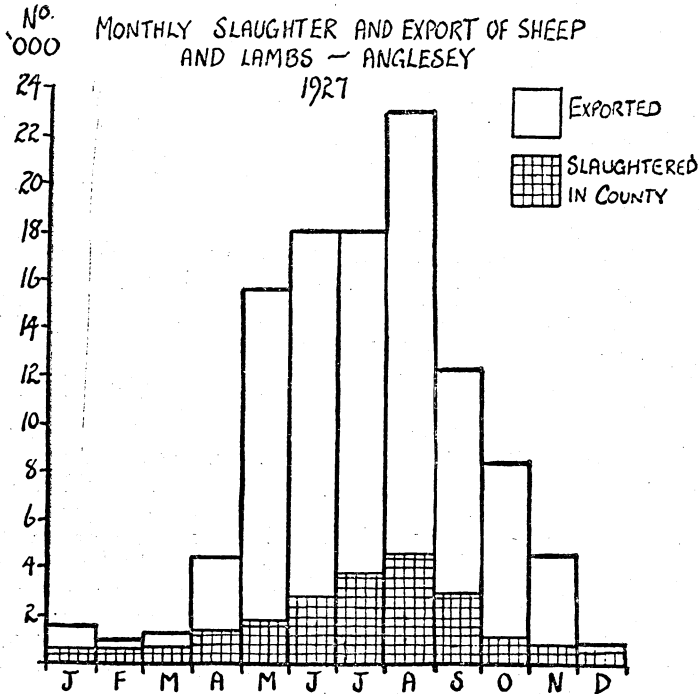
* Information supplied by the Secretary of the Wiltshire Horn Sheep Society.

** "Breeding Experiments with Welsh Mountain Ewes for the production of Fat Lambs," Dept. of Agriculture, University College of N. Wales, Bangor, 1901-1916.

Seasonality of sales and estimated deadweight of lambs

A survey of sheep farming carried out in Anglesey in 1927* showed the characteristic seasonality of the sheep trade in the county—this being due to the practice of fattening on grass. No distinction was possible between lambs and other classes of sheep, but the histogram in Fig. 1 is of interest when compared with the graph for later years in Fig. 3, particularly in view of the forthcoming changes in the marketing of livestock.

FIG. 1.



It is reasonable to assume that the pattern of sales shown in Fig. 1 was maintained up to 1939. The peak sales period occurred in August when a considerable proportion of the exportable surplus was sent to the North Wales coast resorts. The number of sheep, presumably lamb and young mutton, produced in May, is of particular significance in view of the data which will be given for 1952 and 1953.

* Unpublished Report on the Production and Marketing of Sheep and Lambs in Wales 1927. T. Lewis.

J. Llefelys Davies, "The Marketing of Sheep in Wales," Report of the Welsh National Conference on the Breeding and Marketing of Sheep, 1931.

The pattern of seasonality of sales in 1952 and 1953 shows considerable differences from that given in 1927. The six collecting centres in Anglesey are Menai Bridge, Llangefni, Valley, Llanerchymedd, Bodorgan and Ty Croes. The areas from which these centres draw fat lambs are given in the map in Fig. 2, where it is seen that Menai Bridge is used as a centre by farmers from the adjoining part of Caernarvonshire, whose lambs amount to about 40 per cent. of the total graded at this centre.

FIG. 2.

COLLECTING CENTRES OF FAT STOCK FOR SLAUGHTER IN ANGLESEY



A total of 75,936 lambs were graded at the six collecting centres during 1952. The number increased to 86,155 in 1953. The histograms in Fig. 3 show the distribution of these sales during the two years. In order to assess the influence of lightweight pure Welsh lambs from Caernarvonshire and thus to obtain a true picture of the sales of Anglesey bred lambs, the lambs sold at Menai Bridge have been distinguished from the others in these histograms. For the

same reasons two average E.D.W. (Estimated Dead Weight) curves are given in Fig. 3(A) from the beginning of June to the end of the year. Although the lambs graded at Menai Bridge depressed the average annual E.D.W. in 1953 as in 1952 the difference in 1953 was not of sufficient significance to justify the distinction being made in Fig. 3(B). The inclusion of the lambs sold at Menai Bridge in the total number for the Island's centres tends to increase the proportion of the total lambs sold at the beginning and end of the year and depress the proportion in the period 26/25th July to 20/19th September. This may be due to the practice of keeping lambs for a longer period in Caernarvonshire before selling them fat late in the autumn or early spring as hogs.

TABLE 1
Percentage of the total lambs graded during various periods in 1952 and 1953.

Fortnight ending*	Per cent. of Total Sales.			
	All Centres.		All Centres excluding Menai Bridge	
	1952	1953	1952	1953
12th Jan.—17th May ..	4.4	5.3	2.7	4.0
31st May—12th July ..	20.0	30.4	19.5	29.1
26th July—20th Sept. ...	45.9	42.4	49.5	46.0
4th Oct. —1st Nov. ...	20.2	12.4	20.3	20.3
15th Nov.—27th Dec. ...	9.5	9.5	8.0	8.7
Total	100.0	100.0	100.0	100.0

* Correct dates for 1953 are a day earlier than those given in the table for 1952

Since the pattern of seasonality of the sales of fat lambs in both years was largely due to the price schedule, the histograms in Fig. 3 should be read in conjunction with Table 2, which gives the changes that occurred in the price per lb. E.D.W. of first grade lambs. This price was applicable to practically all the lambs graded.

TABLE 2

Changes in the Price per lb. E.D.W. 1952 and 1953.†
(including any bonus paid per lb.)

First Grade Lambs

Period ending*	Pence per lb.		Period ending*	Pence per lb.	
	1952	1953		1952	1953
June 8 ...		42½	Sept. 21 ...	29½	30
„ 15 ...	41½	41½	„ 28 ...	29	29½
„ 22 ...	40¾	39¾	Nov. 23 ...	28¾	29½
„ 29 ...	40½	37¾	Dec. 7 ...	29½	29¾
July 6 ..	31	34½	„ 14	29¾	30½
„ 13 ...	31	33	„ 21 ...	30	30½
August 24 ..	31	31½	„ 28 ..		30½
„ 31 ...	30¾	31½			
Sept. 7 ...	30½	31			
„ 14 ...	30	30½			

* The dates in 1953 were one day before those shown in Table 2.

† In addition there were headage payments ranging from 2/- to 6/- in 1952, and from 3/- to 7/- in 1953, depending on weight and period of grading.

As was seen in Table 1, only about 5 per cent. of the total lambs sold in both 1952 and 1953 had been graded up to mid-May, but during June in both years the numbers presented at the grading centres increased rapidly to a peak in the fortnight ending 28/27th of the month. In 1953 this increase was somewhat more gradual than in 1952 and reference to Table 2 will show that this was due to the more gradual decrease in price that existed in the latter year than in 1952.

In 1952 18.7 per cent. of the annual sales of fat lambs were sold in the four weekly period ending June 28th, 17 per cent. being sold in the latter fortnight of this period when the gross price per lb. E.D.W. for first grade lambs was 40½ pence. On the following day the price fell to 31 pence. The farmers' reaction to this was naturally to grade most of the lambs that would qualify before the 29th June. It is surprising that far more lambs were not graded at this time, as a 35 lb. E.D.W. lamb would fetch £6 1s. 1½d. on June 28th, whereas if kept for a further ten weeks, when it would have increased in weight to about 45 lbs. E.D.W., its value would have been £5 19s. 3d., i.e., 1/10½d. less. In addition, the lamb would have entailed further costs and have faced all the hazards of disease and weather. But whether as a result of honesty or ignorance a large number of lambs that would have yielded higher returns had they been sold before June 29th were kept on the farms and sold at a later date. In the few