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Sheep - Cost 70.5.
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A Review of the Financial Results for 52
Identical Hill Sheep Flocks during the
Years 1960/61 to 1962/63.

by

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July, 1964.

INTRODUCTION.

The 52 identical hill flocks which provide the data for this report are, but for a small number of flocks, the same as those reviewed in a previous report in these series.* Thus a degree of continuity has been maintained in the financial results since 1958/59.

About half the flocks in the sample were drawn from the county of Merioneth, whilst the remainder were drawn from Caernarvon, Denbigh, Brecon, and Montgomery. The size distribution of the flocks is given in Table 1.

Table 1.

Size Distribution of Hill Flocks and Average Number of Breeding Ewes per Flock.

52 Identical Hill Flocks.

Size of Flock (Breeding Ewes).	1960/61.			1961/62.			1962/63.		
	Average:			Average:			Average:		
	Number:			Number:			Number:		
	Breed- ing	No. of Ewes.	No. of Flocks.	Breed- ing	No. of Ewes.	No. of Flocks.	Breed- ing	No. of Ewes.	No. of Flocks.
			%.			%.			%.
Under 200	138	5	10	153	5	10	121	3	6
Over 200 & under 400	328	14	27	326	13	25	306	14	27
" 400 " " 600	511	11	21	505	11	21	508	13	25
" 600 " " 800	696	11	21	697	11	21	698	9	17
" 800	1293	11	21	1239	12	23	1209	13	25
All Flocks	630	52	100	637	52	100	639	52	100

During the three years there was a fall in the number of flocks with under 200 breeding ewes, and a slight increase in the number with over 800 breeding ewes which implies a slight shift towards larger flocks. The average number of breeding ewes per flock in the groups with between 400 and 800 breeding ewes remained fairly steady over the period, but those with under 400 and over 800 breeding ewes showed a decline in average numbers.

The stocking and cropping of the farms in the sample according to size of flock is given in Tables I and II of the Appendix. The acreage given is that which was continually in sole occupation by the farmer, but in many cases farms had in addition grazing rights on the open mountain.

Review of Financial Results for Years 1960/61 to 1962/63.

The dominant feature affecting the financial results for the 52 identical hill flocks during the period under review was weather conditions. Taking this into account the only favourable year was 1961 when the sheep benefited from the growth and quality of the pastures. Adverse weather conditions were experienced during 1962 and 1963.

* Economic Studies in Sheep Farming in Wales, Number 4. (A review of financial results for 52 Identical Hill Sheep Flocks during the years 1958/59 to 1960/61).

Cold weather persisted during the first six months of 1962, being more intense in the early part of the year with widespread frost and snow. This had at least two consequences, firstly, it affected the lambing season, leading to relatively poor results; and, secondly, owing to the persistent cold weather the hay harvest produced a light crop which meant that home-grown fodder supplies were relatively lower than usual to meet what was to be a long and hard winter.

During the months July to September, 1962, moister conditions stimulated the growth of grass which enabled the sheep to improve in condition during the brief period of dry sunny weather in October. However, colder conditions returned in mid-November and were to persist until March 1963, with the land covered in snow for long periods and affected by hard frost. Following this long cold spell came a period of wet weather, with temperatures lower than normal for the time of year.

In the light of these conditions the average financial results per flock, as given in Table 2, revealed a fall of 13 per cent in output, and a cost increase of 27 per cent, with the consequence that the margin per flock fell by 66 per cent over the three years.

Table 2.

Output, Costs, and Margins per Flock
52 Identical Hill Flocks.

	1960/61.	1961/62.	1962/63.
	£.	£.	£.
<u>Output -</u>			
Opening Valuation of Sheep:	3729	3675	3764
Purchases of Sheep	85	94	61
Total (A)	3814	3769	3825
Closing Valuation of Sheep	3675	3732	3587
Sales of Sheep	1975	1730	1633
Sales of Wool	540	512	448
Hill Sheep Subsidy	103	181	309
Total (B)	6293	6155	5977
Output (B - A)	2479	2386	2152
<u>Costs -</u>	£. : %.	£. : %.	£. : %.
Hand-Fed Foods	31 : 2	44 : 3	279 : 16
Grazing	243 : 18	258 : 17	251 : 14
Forage Crops	19 : 1	24 : 2	20 : 1
Agistment	393 : 28	416 : 28	407 : 23
Labour	463 : 33	490 : 32	553 : 31
Transport	39 : 3	41 : 3	38 : 2
Miscellaneous	214 : 15	227 : 15	239 : 13
Total	1402 : 100	1500 : 100	1787 : 100
Margin (Output - Costs)	£. 1077	£. 886	£. 365

The results for the 52 flocks by size of flock are given in Table III of the Appendix. The fall in margin per flock was least in those with under 200 breeding ewes, amounting to about 34 per cent, and greatest in those with over 800 breeding ewes, amounting to 85 per cent.

The frequency distribution of the flocks according to the margin obtained per ewe in Table 3 showed how relatively favourable conditions were in 1960/61 as compared with the other two years. In 1960/61 42 per cent of the flocks had a margin of over £2 per ewe as compared with 40 per cent of the flocks in 1962/63 with a margin of less than £1 per ewe, and a further 21 per cent which suffered a loss.

Table 3.

Distribution of Flocks According to Margin per Ewe.52 Identical Hill Flocks.

Margin per Ewe.	1960/61.		1961/62.		1962/63.	
	No.	%.	No.	%.	No.	%.
Loss	-	-	1	1.9	11	21.1
Under £1	10	19.2	14	26.9	21	40.4
Over £1 & under £2	20	38.5	26	50.0	15	28.9
Over £2	22	42.3	11	21.2	5	9.6
Total	52	100.0	52	100.0	52	100.0

The two items which accounted for the increase in costs were hand-fed foods and labour. Some increase in the cost of hand-feeding was noted in 1961/62 to meet the adverse weather conditions, but this item showed a tremendous increase in 1962/63 and accounted for 16 per cent of total costs. In nearly all cases the hand-feeding was of purchased food. The increase in labour cost reflected the increase in time spent in greater care and attention needed by the flocks during the difficult winters.

On the output side, although there was an overall fall of 13 per cent, income from the sale of sheep and wool fell by 17 per cent which was counter-balanced to some extent by an increase in the amount received under the Hill Sheep Subsidy. The latter payment is, however, a retrospective one, which when received in 1962/63 reflected conditions obtaining in 1961/62. To account for the fall in the income from the sale of sheep and wool it is necessary to consider the physical results of the enterprise over the three years, and the average prices realised for sheep and wool.

Table 4.

Productivity of Breeding Ewes per 100 Ewes Mated by Size of Flock.52 Identical Hill Flocks.

Year.		Breeding Ewes per Flock.					
		Under : 200	: 200-400	: 400-600	: 600-800	: Over : 800	: All Flocks
<u>1960/61:</u>							
Ewes:	Lambing	89	91	92	90	85	88
	Barren	8	8	6	8	11	9
	Died	3	1	2	2	4	3
	Total	100	100	100	100	100	100
<u>1961/62:</u>							
Ewes:	Lambing	91	92	94	91	89	91
	Barren	4	5	4	7	8	7
	Died	5	3	2	2	3	2
	Total	100	100	100	100	100	100
<u>1962/63:</u>							
Ewes:	Lambing	88	94	91	93	84	89
	Barren	6	4	5	6	9	7
	Died	6	2	4	1	7	4
	Total	100	100	100	100	100	100

The largest flocks, with over 800 breeding ewes, showed each year a higher than average number of barren ewes, and also, losses through death. In the second and third year the smallest flocks, with under 200 breeding ewes, suffered higher than average deaths in breeding ewes. This was probably a reflection of the variable quality of the ewes in these flocks, because the conditions under which they subsisted were relatively more favourable than those for the other size groups. The bad weather during two winters could have led to the general expectation of higher losses among ewes. In fact, however, although this was the case in many individual flocks, the average results reflect the careful management exercised, and in particular the hand-feeding of the ewes which was carried out to a degree greater than usual.

The full impact of the weather conditions may be seen in the lambing results.

Table 5.

Lambing Results per 100 Ewes Mated by Size of Flock.

52 Identical Hill Flocks.

Year.		Breeding Ewes per Flock.						All Flocks
		Under 200	200-400	400-600	600-800	Over 800		
<u>1960/61</u> -								
Lambs: Born Alive		97	93	93	90	85		89
Died		8	5	8	7	9		8
Weaned		89	88	85	83	76		81
<u>1961/62</u> -								
Lambs: Born Alive		99	95	96	91	88		91
Died		13	12	10	12	14		13
Weaned		86	83	86	79	74		78
<u>1962/63</u> -								
Lambs: Born Alive		99	97	93	93	84		89
Died		6	18	19	19	20		19
Weaned		93	79	74	74	64		70

On the average, losses in lambs over the three years rose from 9 per cent to 21 per cent. In 1962/63, for example, the range by size of flock was from 6 per cent in the smallest to 24 per cent in the largest. A consequence of this situation is shown in Table 6.

Table 6.

Disposal of Lambs Weaned per 100 Ewes Mated.

52 Identical Hill Flocks.

	1960/61		1961/62		1962/63	
	No.	%	No.	%	No.	%
Retained: Ewe Lambs	36	45	35	45	30	43
Ram Lambs	1	1	1	1	1	1
Sold as Fat Lambs	7	9	8	10	8	11
Sold as Store Lambs	31	38	26	34	22	32
Lambs on Hand for Sale	6	7	8	10	9	13
Total	81	100	78	100	70	100

Since these were self-maintained flocks, all ewe lambs were retained each year for flock replacements. With a relative fall in the number of weaned lambs, fewer ewe lambs were available for replacement purposes, with the result that the size of the breeding flock was ultimately affected.

This may be illustrated in the following way. The potential breeding flock is that given in the opening valuation at the beginning of the year, and consists of older ewes, shearling ewes, and ewe-lambs. On the one hand, the numbers drafted out during the year or lost through death may be represented as a percentage of this total; on the other, the ewe-lambs from a particular year's crop retained for replacement purposes may also be expressed as a percentage of it. For the three years under review, and on average for the 52 hill flocks, these figures were found to be as shown below.

<u>Year.</u>	<u>Ewes Died or Drafted out as Proportion of Total Ewes and Lambs in Opening Valuation.</u>	<u>Ewe-Lamb Replacements as Proportion of Total Ewes and Lambs in Opening Valuation.</u>
	<u>%.</u>	<u>%.</u>
1960/61	26	28
1961/62	27	27
1962/63	27	23

In the first year the replacements constituted a higher proportion than the ewes withdrawn or lost from the breeding flock. In the second year the proportions were about equal, but in the third year replacements fell short of requirements. The influence of this factor accounted for the variation in the average number of breeding ewes per flock in the different size groups, over the three years, which is apparent from Table 1.

Thus, in the years when weather conditions cause relatively heavy losses of lambs, the requirements that all ewe-lambs be retained for replacement purposes means, not only that fewer lambs are available for sale, but also that in order to make up for the deficiency in replacements relatively fewer ewes are drafted from the flocks. This point is illustrated in Table 7.

Table 7.
Number of Sheep Sold per 100 Breeding Ewes.
52 Identical Hill Flocks.

	<u>1960/61.</u>		<u>1961/62.</u>		<u>1962/63.</u>	
	<u>No.</u>	<u>%.</u>	<u>No.</u>	<u>%.</u>	<u>No.</u>	<u>%.</u>
Draft Ewes	28	35	30	42	27	40
Store Lambs	33	42	27	38	23	34
Fat Lambs	11	14	10	14	13	19
Wethers	6	8	3	4	4	6
Rams & Ram Lambs	1	1	1	2	1	1
Total	79	100	71	100	68	100

Although the average number of lambs sold per 100 breeding ewes fell over the three years, the proportion of this total which were sold fat increased from one quarter to one-third. The proportion of lambs sold fat is generally higher in the smaller flocks than in the larger ones, but in 1962/63 there was a marked increase, compared with other years, in the figure for the flocks with over 800 breeding ewes. On the average, fat lambs realised about £1 per head more than store lambs, as shown in Table 8.

Table 8.

Average Prices per Head for Sheep Sold.52 Identical Hill Flocks.

	: 1960/61. :	: 1961/62. :	: 1962/63.
	: £. s. d :	: £. s. d :	: £. s. d
Draft Ewes	: 3.10. 5 :	: 3.10. 6 :	: 3. 9.10
Store Lambs	: 3.12.11 :	: 3.11. 1 :	: 3. 7. 2
Fat Lambs	: 4.17. 0 :	: 4.11. 8 :	: 4. 8.10
Wethers	: 4.13. 4 :	: 4.14. 6 :	: 4.11.10
Rams & Ram Lambs	: 15. 5.11 :	: 12. 2. 4 :	: 12.17. 4

Draft ewes maintained a relatively stable price during the three years. The decline in the average price per head for store lambs was a reflection of the deterioration in their quality, caused by the weather conditions. The average prices per head by size of flock are given in Table VI in the Appendix.

The variation in the numbers of sheep sold per 100 breeding ewes, and in the average prices realised per head, is further reflected in the variation in the average percentage distribution of returns from the sale of sheep and wool, as shown in Table 9.

Table 9.

Percentage Distribution of Returns from the Sale of Sheep and Wool.52 Identical Hill Flocks.

	: 1960/61. :	: 1961/62. :	: 1962/63.
	: %.	: %.	: %.
Ewes	: 24.3 :	: 29.7 :	: 29.0
Store Lambs	: 29.7 :	: 27.3 :	: 23.2
Fat Lambs	: 13.3 :	: 13.2 :	: 17.8
Wethers	: 7.8 :	: 3.9 :	: 5.3
Rams & Ram Lambs	: 3.4 :	: 3.0 :	: 3.2
Wool	: 21.5 :	: 22.9 :	: 21.5
Total	: 100.0 :	: 100.0 :	: 100.0

The distribution of returns for the flocks, by size groups, is given in Table VII, in the Appendix. The importance of wool in the total returns per 100 breeding ewes varied according to flock size, ranging in 1962/63 from 17 per cent in the smallest flocks to 24 per cent in the largest. This reflects the relatively greater number of sheep sold per 100 breeding ewes in the smaller flocks as compared with the larger ones. The total weight of wool sold from the 52 identical hill flocks fell from 128.3 thousand lb. in 1960/61 to 114.5 thousand lb. in 1962/63, and in addition the average price realised fell from 4s. 4½d. per lb. to 4s. 0½d.

Consideration of the Results.

Size of flock is a factor of importance affecting the results of the hill sheep enterprise.

When considering the data relating to this enterprise it is necessary to bear in mind that it is conducted under a wide diversity of physical and environmental conditions. This explains the variation in physical results as between the smaller and the larger flocks. The former subsist under more favourable conditions, the ewes spending each winter on relatively low ground; whilst the latter, more or less continuously subsist under exposed conditions.

The financial results, however, show a rising margin between output and costs per flock as size of flock increases. Table 10 is derived from the data in Table III in the Appendix.

Table 10.

Margins per Flock - by Flock Size Group.

52 Identical Hill Flocks.

	:	:	:	:
	:	:	:	: Average
	:	:	:	: Margin
Number pf Breeding	:	:	:	: per Flock
Ewes.	: 1960/61.	: 1961/62.	: 1962/63.	: over 3 Years
	:	:	:	:
	: £.	: £.	: £.	: £.
	:	:	:	:
Under 200	: 375	: 334	: 248	: 330
200 - 400	: 631	: 394	: 227	: 418
400 - 600	: 998	: 861	: 516	: 776
600 - 800	: 1428	: 1234	: 572	: 1111
Over 800	: 1692	: 1354	: 245	: 1057
	:	:	:	:
All Flocks	: 1077	: 886	: 365	: 776

Taking into account these two features of flock size, the physical and the financial, one can imagine a line drawn from the one extreme of relatively good land to the other extreme of relatively poor land. The 52 identical hill flocks would then be placed along this line in order of size. That this situation is not too far removed from reality is shown in Tables I and II in the Appendix. There it can be seen that with declining quality of land there is an increase in flock size, and that the enterprise gradually changes from being a subsidiary one to being the major one on the farm. In this way size of flock is a factor of economic importance in its contribution to the fundamental problem of the hill farming areas, namely income. With a decline in the quality of the land, the enterprise becomes more extensive, the relative fall in the physical results is offset by larger numbers in flocks in order to ensure favourable financial results.

The fall in the margins per flock experienced over the three years has been attributed to the relatively unfavourable weather conditions which prevailed during two of them. Such a possibility is an accepted risk of hill farming. The question arising is whether there is some factor which can cushion, to some extent, the effects of bad weather. Here again flock size can be shown to be of importance. In the last column of Table 10 the average margin per flock over the three years, by flock-size, is given. The first year of the period was a relatively favourable one in terms of margin per flock, whilst the last year was relatively unfavourable. It is not wise to place too much emphasis on one year's results: they should be considered over a period of time. It can be seen from Table 10 that one way to overcome the swings in margins caused by weather conditions is the continuous possession of a relatively large-sized flock.

APPENDIX .

LAND UTILIZATION.

(Average of 3 years 1960/61, 1961/62, 1962/63.)

52 Identical Hill Flocks.

	Breeding Ewes.											
	Under 200		200 - 400		400 - 600		600 - 800		800 & over		All Flocks.	
	Per	Per 100:	Per	Per 100:	Per	Per 100:	Per	Per 100:	Per	Per 100:	Per	Per 100
	Farm.	Acres.	Farm.	Acres.	Farm.	Acres.	Farm.	Acres.	Farm.	Acres.	Farm.	Acres.
Oats, Mixed Corn and Barley	4.7	2.92	3.9	1.06	3.0	0.63	4.1	0.52	0.7	0.03	3.1	0.36
Potatoes	0.2	0.13	0.1	0.02	0.3	0.06	0.1	0.01	negligible		0.1	0.02
Roots for Feeding	0.5	0.29	0.2	0.05	1.3	0.27	0.3	0.03	negligible		0.4	0.05
Green Crop	2.2	1.39	3.3	0.91	4.2	0.87	3.3	0.41	2.7	0.13	3.3	0.39
Hay	22.8	14.16	25.3	6.91	23.6	4.90	36.7	4.64	27.3	1.32	27.4	3.21
Grazing	48.6	30.27	56.2	15.37	66.8	13.90	103.4	13.06	82.4	3.98	73.4	8.61
Direct Reseeding	0.5	0.30	0.3	0.10	0.5	0.11	2.8	0.36	1.1	0.06	1.1	0.13
Rough Grazing	81.1	50.54	276.4	75.58	380.2	79.08	638.0	80.60	1953.9	94.46	742.4	87.13
Total	160.6	100.00	365.7	100.00	479.9	99.82	788.7	99.63	2068.1	99.98	851.2	99.90
Buildings, Roads & Woodlands	-	-	-	-	0.8	0.18	2.9	0.37	0.3	0.02	0.8	0.10
Total Farm Area	160.6	100.00	365.7	100.00	480.7	100.00	791.6	100.00	2068.4	100.00	852.0	100.00

Table II.
Numbers of Livestock Carried.
Average of 3 years 1960-61 - 1962-63.
52 Identical Hill Flocks.

	Breeding Ewes											
	Under 200		200 - 400		400 - 600		600 - 800		800 & over		All Flocks	
	Per	Per 100:	Per	Per 100:	Per	Per 100:	Per	Per 100:	Per	Per 100:	Per	Per 100:
	Farm	Acres	Farm	Acres	Farm	Acres	Farm	Acres	Farm	Acres	Farm	Acres
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Breeding Ewes	116	72	314	86	480	100	628	79	1148	56	589	69
Shearling Ewes	77	48	119	32	217	45	329	42	487	23	264	31
Wethers	1	1	3	1	31	7	57	7	124	6	48	6
Wether Lambs	18	11	25	7	36	7	50	6	95	5	48	5
Rams and Ram Lambs	11	7	12	3	18	4	26	4	47	2	25	3
Total Sheep	223	139	473	129	782	163	1090	138	1901	92	974	114
Cows in milk and in calf	13	8	13	4	19	4	19	2	16	1	17	2
Other Cattle 2 + years	3	2	5	1	4	1	12	2	6	neg.	6	1
Cattle 1 - 2 years	7	4	7	2	8	1	15	2	8	neg.	9	1
Calves 0 - 12 months	8	5	10	3	14	3	17	2	11	1	12	1
Total Cattle	31	19	35	10	45	9	63	8	41	2	44	5
Pigs	1	neg.	1	1	neg.	neg.	1	neg.	neg.	neg.	1	neg.
Poultry	184	114	74	20	27	6	34	4	22	1	53	6
Horses	1	1	neg.	neg.	1	neg.	2	neg.	10	1	3	1

Table III.

Output, Costs and Margins per Flock
by Size of Flock.

52 Identical Hill Flocks.

Size of Flock	Number	Year.	Output	Costs	Margin.
Breeding Ewes	of Farms				
			£.	£.	£.
Under 200	5	1960/61	759	384	375
	5	1961/62	745	411	334
	3	1962/63	682	434	248
200 - 400	14	1960/61	1455	824	631
	13	1961/62	1241	847	394
	14	1962/63	1141	914	227
400 - 600	11	1960/61	2108	1110	998
	11	1961/62	2136	1275	861
	13	1962/63	1899	1383	516
600 - 800	11	1960/61	2872	1444	1428
	11	1961/62	2700	1466	1234
	9	1962/63	2488	1916	572
800 and over	11	1960/61	4540	2848	1692
	12	1961/62	4252	2898	1354
	13	1962/63	3601	3356	245

Table IV.
Disposal of Weaned Lambs per 100 Ewes Mated.

By Size of Flock.

52 Identical Hill Flocks.

	1960/61		1961/62		1962/63	
	No.	%	No.	%	No.	%
<u>Under 200 Breeding Ewes:</u>						
Retained: Ewe Lambs	33	37	37	43	42	45
Ram Lambs	5	6	3	3	7	8
Sold as Fat Lambs	18	20	9	11	-	-
Sold as Store Lambs	21	24	26	30	30	32
Lambs on Hand	12	13	11	13	14	15
Total Weaned Lambs	89	100	86	100	93	100
<u>200 - 400 Breeding Ewes:</u>						
Retained: Ewe Lambs	39	44	35	42	31	39
Ram Lambs	1	1	1	1	1	1
Sold as Fat Lambs	17	19	14	17	19	24
Sold as Store Lambs	27	31	22	27	17	22
Lambs on Hand	4	5	11	13	11	14
Total Weaned Lambs	88	100	83	100	79	100
<u>400 - 600 Breeding Ewes:</u>						
Retained: Ewe Lambs	37	44	39	45	31	42
Ram Lambs	1	1	1	1	1	1
Sold as Fat Lambs	13	15	20	23	13	18
Sold as Store Lambs	30	35	22	26	21	28
Lambs on Hand	4	5	4	5	8	11
Total Weaned Lambs	85	100	86	100	74	100
<u>600 - 800 Breeding Ewes:</u>						
Retained: Ewe Lambs	39	47	35	44	32	43
Ram Lambs	1	1	1	1	1	1
Sold as Fat Lambs	6	7	12	15	11	15
Sold as Store Lambs	31	38	21	27	24	33
Lambs on Hand	6	7	10	13	6	8
Total Weaned Lambs	83	100	79	100	74	100
<u>800 & Over Breeding Ewes:</u>						
Retained: Ewe Lambs	33	43	33	45	28	44
Ram Lambs	1	1	1	1	2	3
Sold as Fat Lambs	2	3	1	1	2	3
Sold as Store Lambs	33	44	31	42	23	36
Lambs on Hand	7	9	8	11	9	14
Total Weaned Lambs	76	100	74	100	64	100

Table V.

Number of Sheep Sold per 100 Breeding Ewes
by Size of Flock.

52 Identical Hill Flocks.

	1960/61		1961/62		1962/63	
	No.	%.	No.	%.	No.	%.
<u>Under 200 Breeding Ewes:</u>						
Draft Ewes	27	30	25	33	29	35
Store Lambs	21	23	15	20	30	37
Fat Lambs	36	39	29	39	14	17
Wethers	1	1	1	1	1	1
Rams and Ram Lambs	6	7	5	7	8	10
Total	91	100	75	100	82	100
<u>200 - 400 Breeding Ewes:</u>						
Draft Ewes	35	38	36	47	31	39
Store Lambs	27	30	22	29	20	26
Fat Lambs	25	28	15	20	26	33
Wethers	2	2	2	3	1	1
Rams and Ram Lambs	2	2	1	1	1	1
Total	91	100	76	100	79	100
<u>400 - 600 Breeding Ewes:</u>						
Draft Ewes	30	36	31	38	30	40
Store Lambs	31	38	23	29	21	28
Fat Lambs	17	21	23	28	22	30
Wethers	3	4	3	4	1	1
Rams and Ram Lambs	1	1	1	1	1	1
Total	82	100	81	100	75	100
<u>600 - 800 Breeding Ewes:</u>						
Draft Ewes	30	34	31	43	31	42
Store Lambs	36	40	23	32	25	34
Fat Lambs	10	11	13	18	12	16
Wethers	12	14	4	6	5	7
Rams and Ram Lambs	1	1	1	1	1	1
Total	89	100	72	100	74	100
<u>800 & Over Breeding Ewes:</u>						
Draft Ewes	24	35	28	42	24	40
Store Lambs	34	50	33	50	24	40
Fat Lambs	3	4	1	2	6	10
Wethers	6	9	3	4	5	8
Rams and Ram Lambs	1	2	1	2	1	2
Total	68	100	66	100	60	100

Table VI.

Average Prices Per Head for Sheep Sold.52 Identical Hill Flocks.

	1960/61.	1961/62.	1962/63.
<u>Under 200 Breeding Ewes:</u>	£. s. d.	£. s. d.	£. s. d.
Draft Ewes	3.13.11	3.17.5	4.11.9
Store Lambs	3.16.5	3.13.3	3.19.6
Fat Lambs	4.11.11	4.13.1	4.19.7
Store Wethers	4.6.5	-	-
Fat Wethers	-	7.0.0	-
Rams and Ram Lambs	20.17.2	16.19.2	13.15.3
<u>200 - 400 Breeding Ewes:</u>			
Draft Ewes	3.9.2	3.7.7	3.8.2
Store Lambs	3.14.0	3.10.9	3.5.6
Fat Lambs	4.19.2	4.13.6	4.4.5
Store Wethers	4.2.8	3.14.6	3.16.4
Fat Wethers	5.0.0	4.3.9	-
Rams and Ram Lambs	13.19.1	10.4.0	11.16.3
<u>400 - 600 Breeding Ewes:</u>			
Draft Ewes	3.11.4	3.8.10	3.16.11
Store Lambs	3.9.8	3.6.6	3.3.1
Fat Lambs	4.12.8	4.8.4	4.12.3
Store Wethers	4.11.2	4.7.11	3.12.6
Fat Wethers	5.0.0	5.4.1	5.12.6
Rams and Ram Lambs	12.12.10	9.6.3	12.0.1
<u>600 - 800 Breeding Ewes:</u>			
Draft Ewes	3.11.1	3.16.6	3.6.5
Store Lambs	3.12.4	3.10.5	3.7.11
Fat Lambs	4.19.9	4.13.11	4.8.2
Store Wethers	4.13.6	4.8.3	4.0.3
Fat Wethers	4.0.0	5.0.7	4.11.3
Rams and Ram Lambs	18.11.5	15.13.6	16.11.8
<u>800 & Over Breeding Ewes:</u>			
Draft Ewes	3.9.10	3.8.7	3.7.8
Store Lambs	3.14.1	3.12.6	3.8.5
Fat Lambs	4.18.10	4.13.10	4.8.10
Store Wethers	4.16.1	4.12.2	4.6.8
Fat Wethers	-	4.10.0	5.0.0
Rams and Ram Lambs	13.7.2	10.15.2	10.11.0

Table VII.

Percentage Distribution of Returns from Sale of Sheep
and Wool by Size of Flock.

52 Identical Hill Flocks.

	1960/61	1961/62	1962/63
<u>Under 200:</u>	%.	%.	%.
Ewes	18.2	21.6	25.1
Store Lambs	14.6	12.0	22.5
Fat Lambs	29.5	29.6	13.5
Wethers	0.9	1.2	0.4
Rams and Ram Lambs	21.3	18.3	21.9
Wool	15.5	17.3	16.6
Total	100.0	100.0	100.0
<u>200 - 400:</u>			
Ewes	26.1	33.2	28.9
Store Lambs	21.9	21.0	17.9
Fat Lambs	26.4	19.7	30.2
Wethers	2.2	1.6	0.9
Rams and Ram Lambs	4.8	3.9	3.2
Wool	18.6	20.6	18.9
Total	100.0	100.0	100.0
<u>400 - 600:</u>			
Ewes	25.3	26.2	30.5
Store Lambs	26.4	18.8	17.5
Fat Lambs	19.2	25.6	26.9
Wethers	3.7	3.3	1.2
Rams and Ram Lambs	3.4	3.3	3.2
Wool	22.0	22.8	20.7
Total	100.0	100.0	100.0
<u>600 - 800:</u>			
Ewes	24.3	32.0	30.0
Store Lambs	29.4	21.7	23.5
Fat Lambs	11.1	17.1	16.1
Wethers	12.9	4.8	5.7
Rams and Ram Lambs	2.8	3.3	4.3
Wool	19.5	21.1	20.4
Total	100.0	100.0	100.0
<u>800 and over:</u>			
Ewes	23.6	29.4	28.0
Store Lambs	35.9	37.9	27.9
Fat Lambs	5.1	1.9	9.4
Wethers	9.2	4.6	9.2
Rams and Ram Lambs	1.9	1.2	1.8
Wool	24.3	25.0	23.7
Total	100.0	100.0	100.0

Table VIII.

Output, Costs and Margins per Flock
by Size of Flocks.

52 Identical Hill Flocks.

Under 200 Breeding Ewes.

	1960/61	1961/62	1962/63
<u>Output:</u>	£.	£.	£.
Opening Valuation of Sheep	938	913	817
Purchases of Sheep	29	6	17
Total (A)	967	919	834
Closing Valuation of Sheep	939	938	825
Sales of Sheep	648	569	527
Value of Wool	119	119	105
Hill Sheep Special Payment	20	38	59
Total (B)	1726	1664	1516
Output (B - A)	759	745	682
<u>Costs:</u>	£. : %.	£. : %.	£. : %.
Hand-Fed Foods	19 : 5	34 : 8	40 : 9
Grazing	81 : 21	75 : 18	86 : 20
Forage Crops	16 : 4	31 : 8	- : -
Agistment	50 : 13	45 : 11	79 : 18
Labour	137 : 36	141 : 34	151 : 35
Transport	7 : 2	7 : 2	4 : 1
Miscellaneous	74 : 19	78 : 19	74 : 17
Total	384 : 100	411 : 100	434 : 100
Margin (Output - Costs)	375	334	248
Number of Flocks	5	5	3

Table IX.

Output, Costs and Margins per Flock
by Size of Flocks.

52 Identical Hill Flocks.

200 and Under 400 Breeding Ewes.

	1960/61	1961/62	1962/63
Output:	£.	£.	£.
Opening Valuation of Sheep	1873	1770	1681
Purchases of Sheep	129	110	56
Total (A)	2002	1880	1737
Closing Valuation of Sheep	1887	1842	1637
Sales of Sheep	1236	945	893
Value of Wool	282	245	208
Hill Sheep Special Payment	52	89	140
Total (B)	3457	3121	2878
Output (B - A)	1455	1241	1141
Costs:	£. : %.	£. : %.	£. : %.
Hand Fed Foods	10 : 1	32 : 4	103 : 11
Grazing	191 : 23	200 : 23	172 : 19
Forage Crops	19 : 2	11 : 1	10 : 1
Agistment	155 : 19	175 : 21	149 : 16
Labour	294 : 36	285 : 34	328 : 36
Transport	18 : 2	16 : 2	16 : 2
Miscellaneous	137 : 17	128 : 15	136 : 15
Total	824 : 100	847 : 100	914 : 100
Margin (Output - Costs)	631	394	227
Number of Flocks	14	13	14

Table X.

Output, Costs and Margins Per Flock
by Size of Flock.

52 Identical Hill Flocks.

400-600 Breeding Ewes.

	1960/61	1961/62	1962/63
<u>Output:</u>	£.	£.	£.
Opening Valuation of Sheep	3206	3127	3301
Purchases of Sheep	57	137	60
Total (A)	3263	3264	3361
Closing Valuation of Sheep	3202	3230	3145
Sales of Sheep	1627	1560	1490
Value of Wool	458	460	388
Hill Sheep Special Payment	84	150	237
Total (B)	5371	5400	5260
Output (B - A)	2108	2136	1899
<u>Costs:</u>	£. : %.	£. : %.	£. : %.
Hand-Fed Foods	30 : 3	38 : 3	220 : 16
Grazing	217 : 19	263 : 21	218 : 16
Forage Crops	44 : 4	26 : 2	43 : 3
Agistment	276 : 25	333 : 26	263 : 19
Labour	344 : 31	382 : 30	413 : 30
Transport	27 : 2	34 : 3	31 : 2
Miscellaneous	172 : 16	199 : 15	195 : 14
Total	1110 : 100	1275 : 100	1383 : 100
Margin (Output - Costs)	998	861	516
Number of Flocks	11	11	13

Table XI.

Output, Costs and Margins Per Flock
by Size of Flock.

52 Identical Hill Flocks.

600-800 Breeding Ewes.

	1960/61	1961/62	1962/63
<u>Output:</u>	£.	£.	£.
Opening Valuation of Sheep	4253	3989	4097
Purchases of Sheep	108	80	92
Total (A)	4361	4069	4189
Closing Valuation of Sheep	4080	4019	3902
Sales of Sheep	2447	2020	1936
Value of Wool	591	541	496
Hill Sheep Special Payment	115	189	343
Total (B)	7233	6769	6677
Output (B - A)	2872	2700	2488
<u>Costs:</u>	£. : %.	£. : %.	£. : %.
Hand-Fed Foods	20 : 1	38 : 2	268 : 14
Grazing	295 : 20	332 : 23	338 : 18
Forage Crops	10 : 1	40 : 3	6 : -
Agistment	381 : 26	299 : 20	425 : 22
Labour	486 : 34	508 : 35	587 : 31
Transport	22 : 2	20 : 1	25 : 1
Miscellaneous	230 : 16	229 : 16	267 : 14
Total	1444 : 100	1466 : 100	1916 : 100
Margin (Output - Costs)	1428	1234	572
Number of Flocks	11	11	9

Table XII.

Output, Costs and Margins Per Flock
by Size of Flock.

52 Identical Hill Flocks.

800 Breeding Ewes and Over.

	1960/61	1961/62	1962/63
<u>Output:</u>	£.	£.	£.
Opening Valuation of Sheep	7359	7101	6919
Purchases of Sheep	60	88	55
Total (A)	7419	7189	6974
Closing Valuation of Sheep	7264	7140	6549
Sales of Sheep	3393	2955	2617
Value of Wool	1091	987	813
Hill Sheep Payment	211	359	596
Total (B)	11959	11441	10575
Output (B - A)	4540	4252	3601
<u>Costs:</u>	£. : %.	£. : %.	£. : %.
Hand-Fed Foods	76 : 3	70 : 2	590 : 18
Grazing	355 : 13	325 : 11	345 : 10
Forage Crops	4 : -	19 : 1	24 : 1
Agistment	979 : 34	1017 : 35	894 : 27
Labour	920 : 32	939 : 32	1005 : 30
Transport	111 : 4	109 : 4	85 : 2
Miscellaneous	403 : 14	419 : 15	413 : 12
Total	2848 : 100	2898 : 100	3356 : 100
Margin (Output - Costs)	1692	1354	245
Number of Flocks	11	12	13

