

Not for Publication

H.F.R.O. 161

HILL FARMING RESEARCH ORGANISATION

FARM REPORTS AND SUMMARY OF FLOCK RECORDS
YEAR ENDED OCTOBER 1965

I FARM REPORTS - 1964-1965

A. GLENSAUGH

Weather

The weather in 1964/65 was mainly cloudy, damp and cold. The winter had little snow, the heaviest fall being on the 5th March (5 inches). The longest period of lying snow was from the 26th February - 10th March. The summer was very cloudy, with temperatures well below the seasonal normal. April was the only month to have average sunshine.

There were 979 hours sunshine during the year. This is the lowest recorded for over 10 years. Only April and May had more than 100 hours (172 and 103 respectively).

30.07 inches of rain fell during the year. This was the lowest rainfall for over 6 years. There were no long dry periods as the rain consisted of many light showers evenly spread throughout the year.

Weather Records, November 1964 - October 1965

Month	Rainfall (inches)	Sunshine (hours)	Mean Daily Air Temp. °F.
<u>1964</u>			
November	1.15	64.3	41.3
December	3.22	37.0	34.6
<u>1965</u>			
January	2.48	63.7	34.7
February	0.97	66.7	37.9
March	1.86	85.4	37.0
April	3.30	172.4	43.1
May	2.28	103.4	47.3
June	2.93	94.3	54.2
July	3.39	79.0	52.7
August	1.72	96.4	53.0
September	4.59	68.3	51.2
October	2.18	48.7	47.6
Total	30.07	979.6	

10 year
Average 40.3 1399.0
1955 - 1964

SHEEP - Hill flock

The rams were put out on 12th November and for the first three weeks the weather was good. We then had snow, and all sheep were fed hay for 4 or 5 days, after which the weather improved.

Generally speaking the winter was better than average, apart from two spells with gale force winds in January and February. There were a few heavy snow falls but the snow did not lie for long. The early part of March was probably the worst of the winter. General feeding of hill ewes began as usual on the 14th February. The gimmers in the Forestry Park were given normal hill treatment as far as feeding was concerned, but had access to arable ground along with the hill grazing all the year round.

Of the 691 hill lambs marked, 674 were weaned, giving weaning percentage of 103.2, including the progeny of the inbreeding experiment.

Weaning weights of lambs were recorded but not averaged as too many had been retained inbye for experimental purposes to give a true picture of the hill weaning weights. It is, however, estimated from sample random lots that the average weight was 4 - 5 lb lower than the previous year. This would perhaps be expected in a wet summer.

The average fleece weight was 3.6 lb for ewes and 3.7 lb for hogs.

Inbye and Shed Sheep

A low-ground sheep stock of 193 cast BF ewes and 12 very poor inbred BF ewes was maintained. These were fed hay, silage and latterly a concentrate. The feeding of the concentrate was continued for 3-4 weeks after lambing.

In addition to this flock 59 ewes involved in research work in the sheep shed were added to the inbye flock after completing the shed programme.

In all 290 lambs were marked from these ewes and 282 were weaned (see table).

Summary of Inbye Flock

Group	Ewes to tup	Tup eild and abortions	Lambs marked		Lambs weaned	
			Total	%	Total	%
Bought Casts	97	16	111	114.4	109	112.4
Home Casts	96	16	103	107.3	101	105.2
Inbreds	12	6	6	50.0	4	33.3
Sheep House	59		70	118.6	68	115.3
Totals	264	38	290	109.8	282	105.3

The lambing percentages cannot be considered very satisfactory and this was mainly due to the high proportion of tup eild ewes. There were 16 in the bought casts, 16 in the homebred casts and 6 in the inbreds. These, although not producing lambs, were sold in April at over £2 more than their valuation or purchase price and at least paid for their keep.

Disposal of Lambs

This year hill lambs and low ground lambs were not kept separate when sold to the F.M.C. and the following figures are for both lots.

Retained as stock replacements	210
Sold store	188
Sold fat	262
Lambs on hand	289
Deaths	<u>7</u>
	<u>956</u>

In all cases except the top draws it was found that the hand-fed lambs consumed more feed than usual to attain grading weights and, although the average of £4.15/- for the 450 sold can be considered satisfactory on the year's trade and general lamb condition, perhaps 5/- per head was needed in extra feed costs. The balance of 289 lambs may need even more feed per head.

CATTLE

The breeding herd numbered 78 at the beginning of the year and included 8 first-calving heifers. During the year 4 cows were sold and 2 died, leaving 72 cows plus 8 in-calf heifers bought in the Spring and bulled on the farm and a further 5 in-calf heifers bought in November 1965.

All calves were born between January and April and 66 homebred together with 2 bought calves were presented for subsidy. This was the best year on record at Glensaugh as far as calves reared and calving percentage was concerned.

Summary of Calf Births and Deaths

Calves born dead	Calves born alive	Calves died after birth	Calves bought	Calves weaned
2 (Abortion)	68	2 (1 very poor twin, 1 pneumonia)	2	68

The following table shows the calving figures over the last 6 years.

Year	Cows mated	Dead calves	Died after birth	Homebred calves reared	% calves weaned
1960	66	6	5	53	80%
1961	83	10	8	59	71%
1962	87	11	10	63	72%
1963	78	9	4	61	78%
1964	91	7	12	66	72.5%
1965	78	2	2	66	84.6%

It is felt that this improved result, particularly in the much lower losses of calves after birth, is due the provision of shelter for all calves up to the age of 7-10 days. This was a simple lean-to structure in a small paddock, and it at least provided the calves with a dry bed and some degree of shelter until they were properly footed.

The following tables show live-weight of cows, weaning weight of calves, sales, prices, etc.

Live-weight of Cows at November 1965

Breed	No.	Average weight (lb)
Galloway	14	1116
SH. x Galloway	11	1130
SH. x Highland	9	1129
Aberdeen Angus x	34	1121
Hereford x	7	1192
Shorthorn x	5	1199
Average		1133

Weaning Weight of Calves - October 1965

Sire of calves	Male		Female	
	No.	Average weight (lb)	No.	Average weight (lb)
Hereford	18	460	17	444
Aberdeen Angus	20	450	13	393

Cattle Sales

All the 1964 calves not sold in the Autumn of 1964 were wintered and sold (a) 35 in the Spring of 1965 and (b) 18 put to grass and sold in the Autumn of 1965.

(a) Spring Sales

No. and Sex	Average weaning weight (lb) October 1964	Average pre-sale weight (lb) Spring 1965	Average price
20 Bullocks	450	760	£67.5/-
15 Heifers	430	672	£56.0/-

(b) Autumn Sales

No. and Sex	Average weaning weight October 1964	Average pre-sale weight Autumn 1965	Average price
7 Bullocks	344	770	£61
11 Heifers	363	742	£59

1965 Calves

18 calves have been sold at the time of this report. Calves were not as good as last year and this was probably due to two factors (a) the wet weather throughout their growing life, and (b) no creep feeding of calves was practised this year. Prices realised were therefore lower than last year. In addition the general opinion was that calf prices were at least £5 lower than at earlier sales.

No. and Sex	Average weight (lb)	Price
9 x Aberdeen Angus Bullocks	538	£40
5 x Hereford Bullocks	575	£38.5/-
4 x Hereford Heifers	549	£35

Cropping 1965 (acres)

	<u>Grain</u>		<u>Roots</u>		<u>Grass</u>
Oats	32	Kale	5	Hay	50
		Turnips	13	Silage	54
		Potatoes	2	Grazing	168
		Rape	12		

Oats

Harvest was extremely late but the first two fields were cut, stooked and led without any rain. The third field was very badly laid and, apart from three acres, could not be cut with the binder. By the time the combines were finished on the bigger farms the weather had broken and 7 acres were left uncut. Any attempt to harvest this in the normal way has been abandoned and it is intended to cut it with the mower and feed it to the out-wintered cows.

Roots

The turnip and potato crops were well up to standard and of good quality. The kale tended to be smothered with weeds in the early part of the Summer but has now got away from them. The rape was late sown and is a good if not heavy crop.

Hay and Silage

This must have been one of the most difficult hay seasons on record and some fairly mature grass was ensiled rather than risk making bad hay. It is estimated that only 50% of the hay is good with the balance ranging from fair to poor. Approx. 70 tons of hay were made and 220 tons of silage.

Reclamation

The permanent grass mixture has now been sown in the area on the Cairn known as the Upper Redstones and appears to have caught well.

Heather Burning

No heather burning was carried out this year.

Buildings

A new garage has been constructed at the new cottage and extensive repairs had to be carried out to the implement shed following gale damage.

Fences

Approx. 1000 yards of new fencing was erected this year to replace fences which were beyond repair.

B. LEPHINMOREWeather

The first half of November 1964 was mainly mild, with growth evident at sea level. The second half of the month was mainly cold, with rain, snow and sleet continuing into December, and conditions at tugging time were the worst for some years. The first half of January was wet and stormy and the remainder of the month cold and dry, with hard frost continuing into February. The third week of February was dry, mild and sunny, but this spring-like weather was short-lived with a return to hard frost in the last week. March continued cold, with snow on the 3rd; conditions on this date were similar to and almost as severe as the blizzard in February, 1963. A spell of mild growthy weather followed mid-month, but this gave way to snow and east winds. Pre-lambing weather was quite good, wet at times, but quite growthy. Lambing started with cold winds, sleet and hail showers and snow on the 'tops'. The first ten days were mixed, fairly cold with little growth, but thereafter it became a little warmer and growth was quite good. May was mainly wet and cold with odd good days. June on the whole was wet and was the worst for some years. The first three weeks of July were dry, although cold. The first half of August was mixed with a warm sunny spell in the second week. The second half was cloudy, with rain on most days. September was mainly wet, with very heavy rain at times and only odd good days. The first and last weeks of October were mainly wet, with a warm sunny dry spell mid-month. The heaviest rainfall of the year was 1.9 inches on 31st October.

Weather Records, November 1964 - October 1965

Month	Rainfall (inches)	Sunshine (hours)	Mean Daily Air Temp. °F.
<u>1964</u>			
November	7.79	33.1	44.6
December	8.43	26.8	39.1
<u>1965</u>			
January	8.64	62.6	37.3
February	1.13	79.5	38.5
March	4.73	91.1	40.9
April	6.13	132.5	45.2
May	3.96	141.2	51.1
June	7.46	112.3	55.6
July	4.52	140.9	54.8
August	5.92	116.6	56.0
September	6.97	75.4	53.1
October	7.39	84.7	50.7
Total	73.07	1096.7	

10 year
average 1955 ^{67.5} 1964 1236.2

A total precipitation of 86.62 inches was recorded at the rain gauge sited on the Midhill 800 feet above sea level.

SHEEP

Low-End ewes were in best condition in October 1964, followed by Midhill. Barnacarry ewes were lean but had improved considerably by tupping time. At udder-locking Low-End ewes were quite fit and in good heart. Midhill on the whole were in good shape. Forty nine Midhill and seven Low-End lean ewes were drawn off for supplementary feeding. Barnacarry ewes were very lean. Lambing was unusually slow for the first 10 days.

Lambs were smaller than average at weaning. The percentage of lambs weaned was 82. Figures for previous years were

1964	83%
1963	69%
1962	77%

Ninety 'second' lambs were sold at Stirling in August, fetching 67/- per head. Due to the poor prices prevailing at store markets throughout the autumn the remainder were retained on grass and 188 were sold through the F.M.C. at an average price of 67/- and an average carcass weight of 24½ lb. Due to the wet weather in September, lambs did not fatten readily and prices realised were below average. Thirty-eight lambs have been retained for in-shed fattening.

Ewe hoggs were again wintered at Point Farm, Ardlamont, apart from 25 Barnacarry hoggs wintered on the hill. All Barnacarry hoggs were kept at home for hill wintering in 1965-66.

In-shed fattening

Twenty-seven lambs (61 lb live-weight) were housed on 27th November 1964 and fattened, using concentrates and barn-dried hay. Nineteen were graded in January and the remainder on 10th February. The total revenue was £148 and total feed costs £39, leaving a gross margin of £109. Store price in November was estimated at 60/- per head, giving a profit (excluding labour charges) of approximately 21/- per lamb. The average daily intake per lamb was 2 lb concentrates and ½ lb barn dried hay. The average dead weight was 32 lb at 3/6d per lb.

Fat Lamb Prices

Year	No.	Carcass weight (lb)	Price per head
1959	139	29	90/6d
1960	85	27½	78/6d
1961	133	28	90/-
1962	94	27½	81/3d
1963	127	27½	85/9d
1964	111	27½	83/3d
1965	188	24½	67/-

Cast Ewe Prices

Year	No.	Price per head
1959	68	29/6d
1960	56	60/-
1961	59	51/-
1962	43	62/-
1963	75	64/-
1964	45	73/-
1965	54	73/6d

Average Lamb Prices

Year	No.	Wether lambs	No.	Ewe lambs
1959	212	74/-	75	32/6d
1960	235	65/-	99	43/-
1961	235	79/-	90	42/6d
1962	217	82/6d	73	68/-
1963	147	82/6d	63	55/6d
1964	238	80/-	83	67/6d
1965	241	66/9d	37	68/-

Supplementary feeding

Midhill and Low-End hirsels were again fed with concentrates before lambing. Feeding began on 19th February and finished on 14th April, when the ewes were brought inbye for lambing. A total of 38 cwt dairy cake was fed to the Midhill and 25 cwt to the Low-End. A ration of $\frac{1}{2}$ lb per head per feed was offered three times per week. Approximately 16 lb per head was fed at a cost of 5/4d per head, excluding haulage to the hill and labour costs.

CATTLE

Of the 28 cows and six heifers at November 1964, one heifer died through accident on the hill. Thirty calves were born and reared, three of the heifers being eild (one of which had calved the previous year). The calf crop was again sold at Dalmally in October, a top pen of five bullocks realising £40 per head, a drop of £4 on the previous year. The 10 smallest calves were sold in November. Over the two sales, 17 Bullock calves averaged £36.10/- per head and 13 heifers made £31 per head.

Of the eight heifer calves over-wintered, four were sold in April 1965, at £46 per head and the remainder in October at £54 per head. Three in-calf first-cross heifers were purchased during the summer. All calves were again creep-fed with concentrates. Feeding started on 6th September and was continued until the sale on 15th October. Twenty calves were fed a total of 69 lb of cake per calf at a cost of 24/- per head. Ten calves sold on 13th November consumed a total of 127 lb at a cost of 44/- per head. The hill cows were fed from 25th November and over the winter received 18 cwt of hay, 25 lb straw and 2 cwt concentrates per head. Hay feeding was discontinued on 8th May and concentrates on 1st June.

Average live-weight of the cows in November 1964 and November 1965 was 950 lb and 929 lb respectively.

Average weaning weights of the Aberdeen Angus x Shorthorn x Highland calves for 1964 and 1965 are as follows:-

Calves	1964		1965	
	No.	Weight (lb)	No.	Weight (lb)
Heifers	14	428	13	433
Bullocks	12	484	17	466

ARABLE GROUND

Due to wet weather in June, the first cut of hay was not made until 30th June and this was baled and in the drier by 4th July. All the hay crop was secured by 20th July, a total of 32 tons being made, of which 28 tons were put through the drier. Drying costs per ton (electricity only) were as follows:-

Field 4	9 tons @ 12/- per ton
Field 5	9 tons @ 26/- per ton
Field 2	10 tons @ 33/- per ton

214 lambs were fattened or partially fattened off grass and sold through the F.M.C. including 26 lambs from the experimental flock of cast Blackface ewes which were overwintered and summered on the low ground.

Fencing

The roadside fence at Barnacarry was completed in March 1965. High tensile wire was used throughout. The fence was erected in 3 sections, stob distances being 10 yd, 8 yd and 6 yd respectively, with wooden droppers at 6 ft intervals between the stobs. So far the fence has proved stockproof but, in soft ground, indications are that the 10 yd interval between stobs may be too great.

Heather burning

Some 25 acres were burned on the Midhill hirsell in the enclosure above the downfall.

Midhill downfall road

The second section of this road is now completed, making for quick and easy access to Midhill and Low-End hirsells.

C. SOURHOPEWeather

Early November was mild, but snow fell soon after the tups had gone out, and persisted until early December. With fresh falls occurring at the end of the year, December proved to be a cold month. The weather from the New Year until April was unsettled and stormy, with frequent snow showers giving way to periods of dull, rather cold, but drier conditions. An improvement, as lambing began, quickly gave way once again to unsettled cool conditions. The onset of summer brought further cool, wet, unsettled weather and this persisted, one period excepted (August 8th - 14th), until the beginning of October. A feature of the summer months was the below average temperatures and it is perhaps of interest to note that this was the coolest July period in Scotland since systematic weather records were started in 1856. Fortunately, from the harvest point of view October proved reasonably dry and sunny, in marked contrast to the return of wintry weather as tugging again approaches.

Weather Records, November 1964 - October 1965

Month	Rainfall (inches)	Sunshine (hours)	Mean Daily Air Temp. °F.
<u>1964</u>			
November	1.36	58.6	42.4
December	2.87	45.3	35.2
<u>1965</u>			
January	2.24	40.2	34.3
February	1.83	25.0	35.1
March	3.36	124.6	38.6
April	3.13	152.7	43.0
May	2.33	122.5	48.4
June	2.31	152.9	54.2
July	3.89	115.8	52.4
August	2.61	164.4	53.2
September	7.09	63.4	51.0
October	1.52	172.7	49.2
Total	34.54	1238.1	

10 year
Average
1955 - 1964

33.0

1334.7

SHEEP

The condition of the ewe stock prior to tugging 1964 was considered to be satisfactory, the sheep having benefited from the excellent weather of both summer and autumn. The winter, though in no sense severe, was not good, and periods of intermittent storm-feeding of the hill sheep stock were followed by more sustained hay feeding as lambing approached. The hill sheep stock received on average between 35 and 40 lb hay over the winter period, and, in addition, sheep on the Rigg, Gairs and Schil hirsels were given 4 oz concentrates per day over the last 20 days.

Weaning percentages for the South-country Cheviot, North-country Cheviot, and Blackface ewes were 82, 88 and 92 respectively.

The number of twins was below normal, as on hills throughout the Border area. Full recording of all hirsels at Sourhope has now been discontinued and it is difficult to be precise about lamb losses, but data from those hirsels which were recorded suggest that over the farm as a whole the lamb loss between birth and weaning would be similar to that in 1963-64, i.e. 15 - 20%.

Attention was drawn in the previous report to the need for an experimental vaccination policy on the Near-end Hairney Law, where lamb losses from marking to weaning were 20, 6, 12 and 17 respectively for the years 1961 to 1964 inclusive. In the Autumn of 1964 and again prior to lambing, half the ewe stock of 144 ewes was vaccinated with "seven-in-one" vaccine, the other half remaining as control. Age group, condition of the ewe and grazing pattern were taken into consideration in allocating the ewes to treatment or control. Of the five lambs which died between marking and weaning on the heft, four lambs were from unvaccinated ewes and one lamb from a ewe which had been vaccinated; this particular lamb had been noted as 'peculiar' at birth.

The condition of the ewe stock prior to tuppung 1965 proved to be better than was anticipated in view of the poor weather of summer and early autumn. Unfortunately, the wintry weather which set in at the close of the second week in November could hardly have come at a more inopportune time.

In the Autumn of 1965 a considerable re-arrangement of sheep stocks on four of the hefts was carried out. A total of 94 South-country Cheviot ewes, in addition to the regular draft age, were cast from the Park Law, and 110 North-country Cheviot ewes were brought in, together with ewe lambs from the Near-end Hairney Law, to give equal numbers of North and South-country ewes.

The North-country ewes on the Far-end Hairney Law (62 ewes and gimmers) were transferred to the Fasset to join the Blackface and South-country ewes already there. The wether flock on Fasset was moved to the Far-end H. Law where it is intended to establish a wether hirsels; 89 wether lambs were retained there this autumn.

Wether stock as at November 1965

Heft	Aged wethers		Shearling wethers		Wether lambs	
	No.	Breed	No.	Breed	No.	Breed
Hairney Law Far-End	5	Merino	12	S.C.Cheviot	13	Romney Cross
	4	Blackface	9	Blackface	39	Blackface
					36	N.C. Cheviot
Schil	20	Blackface	-	-	-	-
Rigg and Gairs	11	S.C.Cheviot	-	-	-	-
Animal House	2	S.C.Cheviot	-	-	-	-

To the remaining North-country Cheviot ewe stock on the Near-end Hairney Law, augmented by the retention of the draft age for a further year, were added 95, 3-crop 5½ year old ewes purchased from Sutherland in the autumn. A purchase of 30 ewe lambs was also made.

The average price realised for store lambs was as follows:-

372 South-country Cheviot	77/-
177 Blackface	73/-
30 North-country Cheviot	100/-

To date 128 Cheviot lambs (107 S.C.C. and 21 N.C.C.) have been sold fat off rape at an average deadweight of 33 lb to return 101/6d.

Draft ewes were sold as follows:-

South-country Cheviot 6 year old	70/-
Blackface 6 year old	74/-

In addition 76 cast Cheviot ewes have been sold fat to average 74/-.

CATTLE

As in the previous year the winter feeding of the hill cows was straightforward, the cows being able to get valuable grazing from the hill throughout much of the period. Feeding started as late as 25th December and continued until 2nd May, the cows being fed on average 7 cwt hay, 27 cwt good silage and 1½ cwt hill cow nuts, per head. Calving started on 6th February and continued until 26th April. Five calves were lost, each being replaced by a bought-in calf. Of the five deaths, one was the result of a breech-presentation, one perished in a blizzard, two were born dead (at night) and one died at 10 days of age, subsequent post mortem revealing nothing conclusive.

No creep feeding of calves was carried out in 1965. The average daily live-weight gain of the Angus X calves over the main summer period was 2.18 lb/day. Calf trade was disappointing, the prices realised being much lower than in the previous year.

	Aberdeen Angus X calves			Blue-grey calves		
	No. Sold	Average		No. Sold	Average	
		Weight (lb)	Price		Weight (lb)	Price
Autumn 1965	25	518	£34.12/-	7	414	£31.3/-
Autumn 1964	20	567	£42.15/-	7	513	£38.13/-

All Blue-grey cows were mated to the Aberdeen Angus bull as were eight Irish bulling heifers which were purchased in early spring, and the Galloway cows to the White Shorthorn. Thirteen calves are being overwintered, comprising nine home-bred calves for sale in spring and four purchased Blue-grey heifer calves for breeding.

In November 1965 cattle numbers were:-

Cows and in-calf heifers	60
Bulling heifers	5
Heifer calves retained for breeding	4
Calves for sale in spring	9
Bulls	2

Cattle Weights, October 1965

Cows			Sire of calves	Weaning weights of calves			
Breed	No.	Weight October 1965 (lb)		Male		Female	
				No.	Weight (lb)	No.	Weight (lb)
<u>Cows</u>							
Galloway	13	1131	White Shorthorn	5	473	4	414
Blue-grey	34	1164	Aberdeen Angus	14	527	15	481
<u>Heifers in calf</u>							
Blue-grey	13	1028					
<u>Bulling heifers</u>							
Blue-grey	5	836	Friesian	3	520		

Cropping

A total of 32½ acres of grass was cut for hay, only 12 acres of which were won in anything like first class condition. A further 22½ acres was conserved as silage, the quality of which has proved to be excellent. Eight and a half acres of Ymer barley undersown to Italian rye-grass was combined to yield 27 cwt/acre, some 7 tons of which has been wet-stored in polythene bags. Some 650 bales of good barley straw were also obtained. Seven acres of a rape-turnip-rye grass mixture has so far fattened 128 Cheviot lambs.

Roads

Work started at the beginning of May on a 4 mile circular farm road and this has largely been completed.

Building maintenance

Extensive treatment has been carried out to combat wood-worm in the hostel and in two of the older farm cottages, and in addition a large amount of exterior paint work has been completed.

II SUMMARY OF FLOCK RECORDS FOR 1964-65

A. GLENSAUGH

Table 1

Reconciliation of Flock Numbers, 1964-65

Heft	Ewes and Gimmers at Nov. 1964	Cast ewes	Deaths	Gimmers brought in at Nov. 1965	Ewes and gimmers at Nov. 1965
<u>CAIRN</u>	114	74	10	14	44
<u>FINELLA</u>	158	40	9	46	155
<u>BIG HILL</u>	341	88	8	114	359
<u>LOCH HILLS</u>	40	-	-	-	40
Flock Total	653	202	27	174	598

Table 2

Lambing Percentages, 1964 - 65

Heft	Ewes to tup	Tup cild and abortions	Ewes dead Nov. - Apr.	Lambs marked			% Weaned
				Total	%	% 1964	
<u>CAIRN</u>	114	5	10	141	123.6	110	120.2
<u>FINELLA</u>	158	16	9	176	111.4	108	108.2
<u>FORESTRY PARK</u>	40	4	-	58	145.0	-	142.2
<u>BIG HILL</u>							
a) Main Flock	241	32	8	237	98.7	101	90.6
b) Inbreds	38	16		23	60.5	9	
c) Inbred Controls	62	8		56	90.3	62	
Total	341	56	8	316	92.6	75	90.6
Flock Total	653	81	27	691	105.8	90	103.2

Table 3

Weights of Ewes (lb) 1964-65

Heft	Ewes	
	Weights	
	Nov. 1964	Nov. 1965
<u>CAIRN</u>	99	96.2
<u>FINELLA</u>	117	115.2
<u>BIG HILL</u> Main Flock	106	109.8
<u>INBREEDING EXPERIMENT</u> Inbred Progeny Outcross Progeny	99 106	Completed
<u>BIG HILL TOTAL</u>	104	109.8
<u>FOREST PARKS</u> Blackface Cheviot	-	132.4 146.7

B. LEPHINMORETable 4Reconciliation in Numbers of Ewes by Hirsell 1964/65

	Ewes and gimmers Nov.1964	Ewes			Deaths * Nov/Nov.	Gimmers brought in Nov.1965	Ewes transferred		Ewes and gimmers Nov.1965
		Draft	Cast	Slaughtered			(-)	(+)	
Barnacarry	176	9	1	23	6 (3)	48	-	1	186
Low-End	183	24	-	-	14 (10)	44	-	-	189
Midhill	303	39	4	-	25 (18)	84	1	-	318
Total	662	72	5	23	45 (31)	176	-	-	693

* Inclusive of Black Loss noted in brackets

Table 5Lambing Percentages 1964/65

	Ewes to tup	Tup eild and abortions	Ewes dead Nov/April	Lambs born		Lambs marked			Lambs weaned %
				Total	%	Total	%	% 1964	
Barnacarry	153	26	3	137 (11)	89.5	118	77.1	80.5	67.3
Low-End	183	19	5	168 (9)	91.8	159	86.9	87.0	82.5
Midhill	302	38	4	300 (41)	99.3	278	92.7	95.4	88.4
Totals	638	83	12	605 (61)	94.8	555	87.0	88.8	81.7

Pairs of twins noted in brackets under Total Lambs Born
* Abortions not shown above - Midhill 1

Table 6

Weights of Ewes, Hogs and Fleeces (lb) 1964/65

	Ewes				Hogs			
	Oct.* 1964	Apr. 1965	Nov.* 1965	Fleece	Oct. 1964	Apr. 1965	Nov. 1965	Fleece
Barnacarry	106.2	86.0	101.4	3.2	65.0	57.4	88.5	3.2
Low-End	102.4	88.2	100.4	3.9	64.0	61.2	91.1	3.9
Midhill	99.8	85.3	95.7	3.4	62.6	59.4	86.4	3.9
Average	102.2	86.3	98.5	3.5	63.6	59.4	88.1	3.7

* Excluding gimmers

Table 7

Weaning Weights (lb) and Losses of Lambs 1964/65

	Weaning weights				Wt. of lamb weaned per ewe mated	Losses of lambs				
	Singles		Twins			Birth to marking	Marking to weaning	Total	%	% 1964
No.	Weight	No.	Weight							
Barnacarry	78	51.8	16	58.6	35.7	19 *	15	34	24.8	29.3
Low-End	135	57.9	10	53.8	47.5	9 **	8	17	9.1	15.1
Midhill	187	56.7	52	53.1	49.4	22 ***	11	33	11.0	13.0
Totals	400	56.2	78	54.3	45.6	50	34	84	13.9	21.0

* Includes 2 born dead

** Includes 4 born dead

*** Includes 15 born dead

C. SOURHOPE

Table 8

Reconciliation of Ewe Numbers 1964 - 65

* One ewe that was cast from Hairney Law last year has been added to the Fasset N.C.C. flock.

Helt	Ewes & Gimmers Nov. '64	Cast ewes	Deaths ewes & gimmers	Transfer of ewes out	Transfer of ewes in	Ewes purchased	Gimmers transferred in	Gimmers brought in	Hoggs born	Hoggs purchased	Ewes & Gimmers Nov. '65
<u>S.C. Cheviot</u>											
Fasset	121	71	3	7				20	21		60
Ridge	144	28	5					34	40		145
Gelirs	129	27	15		7			37	42		144
Park Law	220	122	11				13	24	24		111
Anchope	210	38	7					54	46		219
Hairney L. Far	60	12	14								34
Total	884	298	55	7	7		13	169	173		713
<u>N.C. Cheviot</u>											
Fasset					30		31		22		62 *
Hairney L. Near	144	7	5	86		95		12	10	29	153
Hairney L. Far	34	1	3	30	86		24		25		110
Park Law											
Total	178	8	8	116	116	95	55	12	57	29	325
<u>Blackface</u>											
Banks & Brow	182	35	6					38	46		179
Aldershope	173	29	7					38	46		175
Fasset	22							20	22		42
Total	377	64	13					96	114		396
Flock Total	1439	370	76	123	123	95	68	277	344	29	1434

Table 9

Lambing Percentages 1964-65

Heft	Ewes to tup	Tup eild & x abortions	Ewes dead + Nov.-April	Lambs born		Lambs marked			Lambs weaned	
				Total o	%	Total	%	1964 %	Total	%
<u>S.C. Cheviot</u>										
<u>Southside</u>										
Fasset	121	7 (0)	-			109	90	88	106	88
Rigg	144	23 (2)	-			119	83	77	116	81
Gairs	129	- -	5			105	81	37	105	81
Total	394	- -	-			333	85	84	327	83
<u>Park Law</u>										
Free Grazing	110	10 (0)	4 (3)	100 (7)	91	86	78	82	84	76
Controlled	110	9 (0)	0	117 (16)	106	101	92	75	100	91
Total	220	19 (0)	4 (3)	217 (23)	99	187	85	79	184	84
<u>Auchope</u>										
Selection	108	11 (1)	3	105 (12)	97	94	87	94	91	84
Control	102	7 (1)	2	110 (18)	108	90	88	90	84	82
Total	210	18 (2)	5	215 (30)	102	184	88	92	175	83
<u>Hairney Law</u>	60	- -	-	- -	-	38	63	90	37	62
Total S.C.C.	884	- -	-	- -	-	742	84	84	723	82
<u>N.C. Cheviot</u>										
<u>Hairney Law</u>										
Near	144	3 (0)	3	163 (25)	113	140	97	111	135	94
Far	34	- -	-	- -	-	25	74	-	22	65
Total N.C.C.	178	- -	-	- -	-	165	93	-	157	88
<u>Blackface</u>										
Banks & Brow	182	14 (4)	-	- -	-	168	92	92	164	90
Alderhope	173	5 (2)	-	- -	-	169	98	78	166	96
Fasset	22	3 (0)	-	- -	-	17	77	-	17	77
Total B.F.	377	22 (6)	-	- -	-	354	94	86	347	92

x Abortions in brackets

+ Ewes Cast before lambing in brackets

o Pairs of Twins in brackets but included in total

Table 10

Weights of Ewes, Hogs, and Fleeces (lb) 1964 - 65

Heft	Ewes					Hogs				
	Weights			Fleece	Deaths	Weights			Fleece	Deaths
	Nov. '64	April '65	Nov. '65	July '65	%	Nov. '64	April '65	Nov. '65	June '65	%
<u>S.C. Cheviot</u>										
<u>Southside</u>										
Fasset	108		109		2.5	71	63	104		4.8
Rigg	106		106		3.5	70	58	98		-
Gairs	108		106		11.6	68	56	97		5.1
Average	107		107		5.8	69	59	99		3.2
<u>Park Law</u>										
Free Grazing	106	95)	114	4.3	7.3	66	55)	102	3.6	4.0
Controlled	111	104)		4.7	2.7	71	61)		4.8	8.0
Average	108	99	114	4.5	5.0	68	58	102	4.2	6.0
<u>Auchope</u>										
Selection	101	95	108	4.0	3.7	66	57	101	4.1	-
Control	100	95	103	4.0	3.0	61	55	94	4.2	-
Average	100	95	106	4.0	3.3	63	56	97	4.2	-
<u>Hairney Law Far</u>	111		120		23.3					
S.C.C. Average	106		108		6.2	67	58	99		3.0
<u>N.C. Cheviot</u>										
Fasset			118					116		
Hairney Law Near	123		127		3.5	84	71	111		2.7
Hairney Law Far	106				8.8	76	66			11.4
Park Law			126					122		
N.C.C. Average	120		125		4.5	80	68	117		6.9
<u>Blackface</u>										
Banks & Brow	105		113		3.3	72	58	106		2.6
Alderhope	112		106		4.0	76	63	102		2.6
Fasset	110		120			67	63	113		4.8
B.F. Average	108		111		3.4	72	61	106		3.0

Table 11

Weaning Weights (lb) and Losses of Lambs 1964-65

Heft	Weaning weights				Av. wt. of lamb weaned	Wt. of Lamb weaned per ewe mated	Losses of Lambs			
	Singles		Twins				Birth to marking	Marking to weaning	Total	
	No.	Weight	No.	Weight						
<u>S.C. Cheviot</u>										
<u>Southside</u>										
Fasset					48.8	42.7		3		
Ligg					49.8	40.2		3		
Gairs					48.5	39.5		0		
Total					49.1	40.7		6		
<u>Park Law</u>										
Free Grazing	72	48.3	2	24.0	47.4	36.2	14	2	16	16
Controlled	71	50.3	9	44.1	49.3	43.6	16	1	17	15
Total	143	49.3	11	40.5	48.4	39.8	30	3	33	15
<u>Auchhope</u>										
Selection	71	46.8	8	44.5	46.4	39.1	11	3	14	14
Control	60	44.5	10	36.9	42.9	35.3	20	6	26	24
Total	131	45.7	18	40.3	44.7	37.3	31	9	40	19
Hairney L. Far					51.8	31.8		1		
Total S.C.C.					48.0	39.1		19		
<u>N.C. Cheviot</u>										
Hairney L. Near	96	57.4	28	57.3	57.4	53.8	23	5	28	17
Hairney L. Far					55.7	36.6		3		
Total N.C.C.					57.1	50.4		8		
<u>Blackface</u>										
Banks & Brow					56.4	50.8		4		
Alderhope					62.2	59.7		3		
Fasset					52.7	40.7		0		
Total B.F.					59.0	54.3		7		