



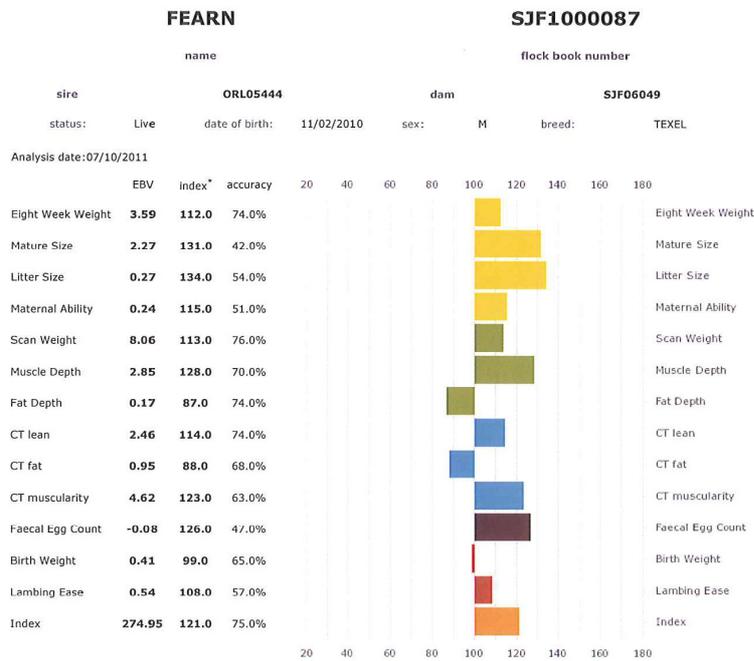
Mull Monitor Farm

*Iain MacKay
Torloisk, Isle of Mull*

Report from Meeting held on the 31st January 2013



powered by SAC



**EBVs from Torloisk Texel Tup
purchased from Fearn Farm**

FUTURE EVENTS

Next Mull MF Meeting

14th March 2013

USEFUL CONTACTS

Iain MacKay
Ian MacDougall, QMS Technical Projects Officer
Niall Campbell & Donald MacKinnon, SAC Facilitators

(Tel: 01688 500 139)
(Tel: 07788 927 520)
(Tel: 01631 563 093)

Useful Web Addresses

QMS:
SGRPID:
SRUC:

www.qmScotland.co.uk
www.scotland.gov.uk
www.sruc.ac.uk

Mull Monitor Farm is supported by QMS and the Scottish Government Skills Development Scheme

Contents

Introduction	3
Aim of the 10 th Meeting:	3
Farm Update	3
Estimated Breeding Values	3
EBVs in Cattle	4
Sheep EBVs	5
The Scottish Sheep Strategy	5
Forage Crop – Lambs Actual Performance	6
Forage Crop – Physical Performance of Lambs	7
Sum Up	9

Top Tips From The Meeting

1. When selecting males for your own flock or herd using EBVs, know what you want your purchase to do, for example produce store calves, breeding replacements or a combination and select using the corresponding traits.
2. Consider establishing a nucleus flock to improve genetic merit and profit.

Introduction

21 members of the Community Group attended the latest meeting at the end of January 2013 held at Salen Hall. Kathy Peebles, Development Officer with QMS Scotland shared her specialist knowledge on sheep and cattle breeding tools while a discussion on the value of the forage crop was had by all.

Aim of the Project:

To improve the efficiency and profitability of the Monitor Farm and other farms in the area

Aim of the 10th Meeting:

- To improve your understanding of EBV's for cattle and sheep as a valuable management tool to select breeding livestock
- To assess the value of the forage crop in a Mull situation

Farm Update

- The hill tups were put straight to the hill in late November, on veterinary advice missed a fluke dose. The stud cheviot flock had tups put out early November.
- The hill was gathered in January and tups taken off – ewes were looking well with plenty of life in them – did not miss the fluke dose in November.
- Although a wet winter, it has been fairly mild with a decent bite of grass available still in January, reflected in the condition of the hill ewes. Worryingly, the mild weather has led to ticks still being quite active so Iain treated ewes with pour on at the January gather.
- The forage crop was well utilised this year, well cleared by early January. 155 head of sheep used the 6 acres.
- Of the 60 initial lambs put on to the crop in September, 40 of these were sold through the Argyll Hill Lamb Group in January, averaging 19kg dead weight.
- Around 58 lambs were sold through the auction market in January averaging only £22.50, highlighting the poor lamb trade at present.
- The remaining lambs are being fed in the shed.
- Cows have been PD'd – a higher number are yeld than Iain would expect.
- Scotbeef looked at the 4 bulls at Perth – ready to go to slaughter in 4 weeks or so.
- Iain has begun weighing calves at birth as a matter of routine.

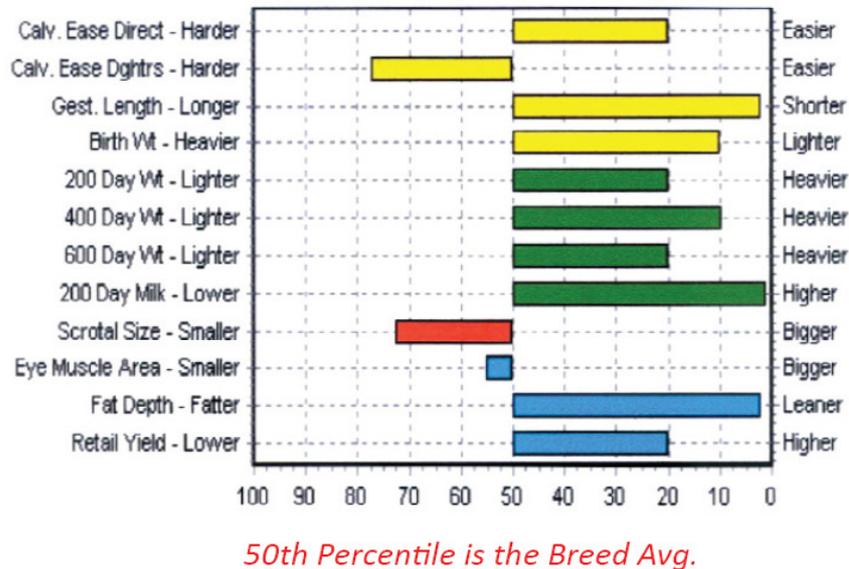
Estimated Breeding Values

Estimated Breeding Values or EBVs are basically a tool that can be used by farmers to predict how well a sire will breed for particular traits. It is important to note that EBVs can only be used to compare animals within the same breed.

Kathy ran sessions on suckler cow EBVs in the morning and sheep EBVs in the afternoon. Both sessions provided valuable back ground and ended in an exercise where the groups were to choose a sire for individual scenarios.

EBVs in Cattle

Figure 1 Typical EBV Display Card



- The graph above shows a typical EBV card for a bull.
- The EBV is expressed as a percentage of the breed average. Typically anything to the right of the centre means the trait is more favourable than the breed average.

Traits measured are:

Birth and fertility traits:

- Including ease of calving – both for the sired animals and also how well the animal produces daughters that calve easily.

Growth traits

- 200, 400 and 600 day growth weights are recorded allowing the buyer to select a bull for his individual need – suckled, store producer or producer finisher.

Carcase traits

- Carcase weight at 650 days is recorded together with eye muscle area and fat.

Producers breeding for heifer replacements and the store market may favour selecting bulls expressing a high EBV for ‘daughters calving ease’, ‘200 day weight’, ‘scrotal size’ (indicating fertility) and ‘200 day milk’. A producer finisher may concentrate more on ‘600 day weight’, ‘fat depth’ and ‘eye muscle area’.

Sheep EBVs

The method of assessing sheep EBVs are similar to that of cattle. However, the traits measured differ as below:

Birth and fertility traits:

- Litter size and Maternal ability.

Growth traits:

- 8 week weight and Scan weight.

Carcase Traits:

- Muscle depth and Fat depth.

Store lamb producers may want to select tups with high EBVs for ‘litter size’ and ‘8 week weight’ – i.e. with the aim of producing more lambs than average and lambs at a higher weight than the breed average at sale.

The Scottish Sheep Strategy

The aim of the Scottish Sheep Strategy is to improve efficiencies and profit in the Scottish sheep sector through increasing the uptake of breeding technologies. This includes use of EBVs and nucleolus flocks.

A trial run by the Scottish Sheep Strategy over 6 farms and 4 lambing seasons compared produce of High Index Tups, Low Index Tups and Farm Choice Tups. This resulted in the High Index trait tups averaging:

- £11 per ewe more than the Low Index Tups
- £5 per ewe more than the Farm Choice Tups.

In addition,

- Greater rearing and finishing success was realised amongst daughters;
- Heavier ewe lambs and gimmers going to tup;
- More uniform batches of lambs at sale.

Mull Nucleus Flock

In Mull and also many other Argyll, Highland and Island hill farms, one of the biggest problems to overcome is bringing in breeding stock, in particular tups, which will be of suitable genetic merit and are used to the type of ground.

Kathy suggested establishing a nucleus flock on the island, and this is also something which had been discussed by Mull farmers previously. This would consist of either a group of individual farms or a number of farms coming together and creating a nucleus flock of what they felt were their best bred ewes – or those most suited to the island. Registered tups would be purchased to put across the nucleus flock and recording of the progeny would take place; and through the use of EBVs and selective breeding the genetic merit of the nucleus flock would increase.

The aim of this will be to produce higher genetic merit tups which would be distributed or sold between the member farms. As the genetic merit of the flock or flocks improved, quality and survival rates of lambs would improve.

Forage Crop – Lambs Actual Performance

60 of the best lambs averaging 28kg were initially put on to the 6 acres of forage crop at the end of September, with the target market being the Argyll Hill Lamb Group where a premium price was set. 20 thinner cast ewes were put on towards the end of October.

Iain went through the initial 60 lambs in December and 14 of these were at the target weight. He decided to take them all off the forage crop and finish inside so a full load could be selected for the abattoir.

A further 75 mixed lambs (brought in from gather and tail end lambs not sent to earlier sales) were put on in December. These lambs weighed on average 25kg.

To date, 40 lambs were sold through the Argyll Hill Lamb Group and 58 lambs were sold through the auction market in January. The remaining lambs are being fed inside with the cast ewes put back on to grass.

Additional costs for retaining these animals were a fluke and worm dose, a trace element bolus, crop establishment costs, creep feed and forage when animals were brought inside and a slaughter charge for animals put through the Argyll Hill Lamb Group. Losses have been fairly minimal, one of the cast ewes and 2 of the smaller lambs died.

The profit or loss realised has been worked out by comparing the market value at September/October against the value of the lambs sold in January together with any additional costs as a result of retaining them. Market price has been used for animals which had not yet been sold.

Revenue Lost	£	Extra Revenue	£
60 lambs x 28kg @ £1.25	2100	40 finished x 19kg x £5.20/kg Forteiths	3952
20 ewes x £12	400	20 store x 35kg x £1.00 Still in shed	700
75 tailenders 25kg x	1125	19 ewes x £30	570
		58 tailenders 28kg x £22.50 (sold)	£1,305
		15 tailenders 28kg x £22.50 (still in shed)	338
	3625		6865
Extra Costs	£	Costs Saved	£
Slaughter Charges £17.5 x 40 lambs	700		
Vet & Med £1.56 x 155 sheep	241.8		
Crop establishment 6acre x £78	468		
Creep in shed 1.25t x £303	379		
Hay 2t x £200/t	400		
	2188.8		0
Extra Benefit	1051.2	Extra Loss	0

- The importance of the Argyll Hill Lamb market is plain to see. Lambs sold through this averaged nearly £100 per head. If these lambs were put through the auction market in a tough year like this it is likely they would have averaged £50-£60 (but no slaughter charge).
- **Overall, the combination of the forage crop and finishing off the lambs inside realised an additional profit of £1051.**

Forage Crop – Physical Performance of Lambs

Lambs were weighed going on and coming off of the crop. The table below sets out the dates when the animals were put on and off the crop together with the average weight gains:

Number of Stock	Date On	Date Off	Weight Change	No Grazing days	Ave Gain/day
60 BF Lambs Ave 28kg on	28-Sep	11-Dec	8.7kg	74	118g/day
75 BF Lambs ave 25kg on	11-Dec	15-Jan	3kg	35	86g/day
20 Cast Ewes	28-Oct	15-Jan	??	79	??

- **Total overall average weight gain is in the region of 102g/day.**
 - This is towards the low end of the scale. However conditions had been particularly wet.
- **An average of nearly 26 ewes and lambs per acre utilised the crop.**
- The 75 lambs which went on to the crop in December were an average of 25kg. Therefore, the lighter lambs may have taken longer to get growing (in general, lambs lighter than 25kg are unable to utilise the forage crop as efficiently as lambs over 25kg), which could explain the lower weight gain. However, Iain was pleased with the difference in them when they came off.
- 14 of the initial 60 lambs were ready to slaughter when they came off the rape; the remainder were too light. Iain felt if it was a less wet year then more lambs would have been finished before Christmas.

Value of the Forage Crop

The group were asked to put values on the stock going on and the stock going off the crop, together with additional costs and costs saved in order to produce a figure demonstrating the value of the forage crop alone. Lambs were weighed going on to the crop and again when taken off – this allowed the group to put a value on the stock.

This year, the stock which used the forage crop was:

- 60BF lambs on late September @ 28kg, off mid December @ 36kg;
- 20 cast ewes on late October fairly skinny and off early January with a good covering on;
- 75 tail end lambs on mid December @ 25kg, off mid January at 28kg.

After discussion, the budget below demonstrates the market price the group put on the stock and costs:

Revenue Lost	12/13 Values	Extra Revenue	12/13 Values
60 lambs x 28kg @ £35 (£40 2011)	£2,100	60 lambs @ 36kg x £30 (£60 in 2011)	£1,800
20 skinny cast @ £12 (£25 in 2011)	£240	19 ewes x £30 (£50 in 2011)	£570
75 lambs @ 25kg @ £15 (£30 in 2011)	£1,125	73 lambs @ 28kg x £22 (£36 in 2011)	£1,606
	£3,465		£3,976

Extra Costs	12/13 Values	Costs Saved	12/13 Values
Crop establish 6acre x £78	£468		
Cosecure bolus 60 x £1.20	£72		
Fluke dose 135 x £0.20	£27		
Worm dose 135 x £0.20	£27		
1 ewe death x £12	£12		
2 lamb deaths x £15	£30		
	£636		0

Extra Benefit £0

Extra Loss £125

- **Therefore, the crop this year would have had a loss of in the region of -£21/acre if the traditional marketing routes were used.**
- The 60 lambs which went on to the crop at £35/head. Although they gained 8kg, they were valued off the crop at £30/head reflecting the weaker market figures since September.
- The group felt this was a tough year for lamb prices. If 2011 values were used then it would result in the enterprise being profitable.
- The forage crop is part of the grassland rotation and aids as a break crop as well as breaking the ground in preparation for grass.
- However, as illustrated in the Actual Performance, the forage crop and feeding lambs inside combined to result in a profit.

Sum Up

Key recommendations from the meeting are:

- The forage crop has been successful and resulted in a profit. It has been utilised well and another area should be sown this coming season.
- The price received through the Argyll Hill Lamb Group was stronger than that through the auction market. Consider committing more animals through the Argyll Hill Lamb Group.
- Mull farmers should consider the value of setting up a nucleus flock.

Date of next meeting	Topics
14 th March 2013	Soil Fertility & Grassland <ul style="list-style-type: none">• Importance of soil structure• Soil clinic• Compaction issues• Recommend what the Torloisk cropping should be for the year

Niall Campbell & Donald MacKinnon

SAC Consulting

Glencruitten Road

Oban PA34 4DW

Tel: 01631 563093

Email: niall.campbell@sac.co.uk , or donald.mackinnon@sac.co.uk