

EWE PERFORMANCE MEASUREMENT AND SELECTION SCHEME

1. Why is the Society Introducing this Scheme?

Over the last 10-15 years there has been a vast expansion in the number of Lleyn in all corners of the UK and Ireland, driven by the excellent maternal performance of the ewes. Hardly a week goes by without some 'good news story' involving Lleyn.

Nonetheless, when you're on top is not the time to take it easy. The Society's Breed Development Committee and Council have taken the decision to introduce a new voluntary, FREE AND INCLUSIVE Scheme to help members improve their own flocks, seeing this as an important part of a continuous process of improving the breed and the national flocks.

The objective of the Scheme is to enable breeders to identify their most productive ewes (from which to breed replacements) and the least productive ewes (to be considered for culling).

VALUE TO BREEDER

Membership of the **SOCIETY SCHEME** will aim to:

- provide a basis for selection of ewes that genuinely perform well on the breeder's farm;
- enable the breeder to improve his/her whole flock year by year;
- allow comparison with averages from other flocks in the region and those from similar environments (lowland/upland/hill);
- generate more/higher value sales through publication of membership of the Scheme.

VALUE TO SOCIETY

Establishment of the Scheme and its commercial performance focus would have a large promotional benefit.

The performance benefits seen year-on-year would also be an important feature of the ongoing Society promotions every year.

By adopting this Scheme, the Society will be generating a
UNIQUE SELLING POINT FOR REGISTERED LLEYN SHEEP
(offering stock of reliable and steadily improving quality)

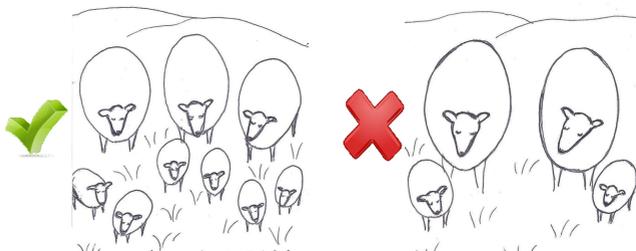
2. What is Involved?

The scheme involves the weighing of lambs at around 8 weeks and ewes at weaning time (around 14 weeks) and generating a weight ratio for each ewe - a performance efficiency figure related to ewe milk production).

This is not a new approach. It has been used by some Lleyn breeders (and others) before. However, it is (a) simple and (b) relates to the key profit drivers for a flock:

- weight of lamb produced per acre;
- time to market.

The way that the scheme works means that medium-sized ewes rearing twins are favoured. There is an in-built bias against large ewes producing singles.



THE ESSENTIALS - WHAT YOU NEED TO DO

BIRTH



For each lambing, you need to note the date of birth and the identity of all lambs born. It is helpful to tag at or soon after birth.

8 WEEK WEIGHING OF LAMBS



Lambs should be weighed between 6 and 12 weeks. The software will make the necessary corrections to put all the weights on a common scale (adjusted to 8 weeks).

WEIGHING OF EWES AT WEANING



Ewes need weighing at weaning, usually around 14 –16 weeks after lambing.

CALCULATE RESULTS



The data gathered above (birth dates, lamb weights and ewe weights) will be processed by the software that the Society will make available by June/July 2015.

MAKE BREEDING DECISIONS



The results will be available as an overall list from best to worst weight ratio but we also hope to make lists available for females of different ages, which should be helpful. Members need to provide a (confidential) flock-average figure to Heather Stoney-Grayshon, for Society promotional purposes.

SUMMARY

Based on weighing lambs at 8 weeks and ewes at weaning

Performance Efficiency = weight of lambs ÷ weight of ewe

Data gathered on-farm by the breeder, for the breeder.

Only the Flock Average figure to be sent to the Society.

The Society will produce flock average figures for breeders' information and promotions, ie overall; regional; lowland/upland/hill.

3. Does it work? Some case Studies.

3.1 Flock 847 (Gill and John Adams)

The Adams' have had a 'production focus' for many years and first used a weight ratio scheme (based on 100 day weighing) in 2010-2011. From the start it was apparent that ewe production efficiency varied enormously. In the first season, the best ewe (60 kg with 2 good twins) reared 1.4 times her body weight at 100 days (ie 84 kg of lamb, ready to go to the butcher). The worst ewe (95 kg with a single) reared only 0.55 times her body weight (adjusted to 100 days), ie 52 kg of lamb.

Culling the worst sheep and retention of ewe lambs from the best has, over the last 4 seasons, 'enabled us to make rapid genetic progress - progress which is essential, we believe, if Lleyn sheep are to perform as the Society promises and remain fully competitive in the rapidly evolving marketplace.'

In 2014, each ewe produced, on average 6 kg more lamb at weaning (100 days) than in 2011.

Improvement in Ewe Performance		
	Average Weight Ratio for Ewes	
	At 8 weeks	At 100 days
2011	0.45	0.83
2012	0.51	0.84
2013	0.54	0.86
2014	0.58	0.91

3.2 Flock 266 (Derek and Olivia Bond)

Derek & Olivia Bond have recorded their flock performance for over 25 years, during which time they became organic and moved from grade 1 Chichester plain onto poor ground on the top of the South Downs. The big sheep melted but smaller, hardier types stood out for their foraging ability.

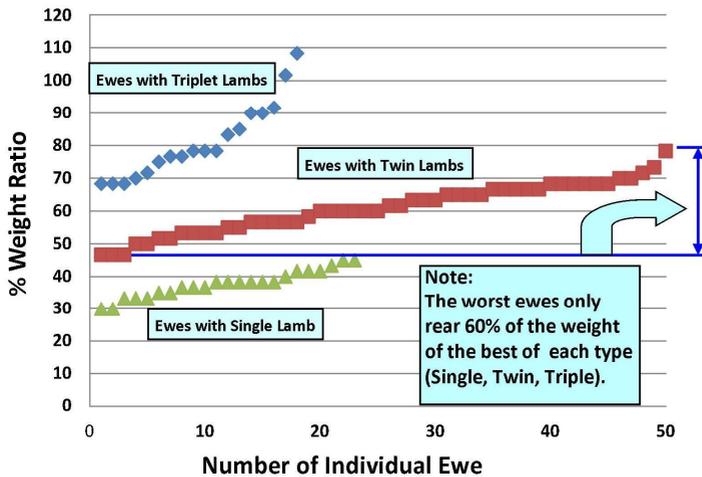
The epiphany came after a dry spring and summer when the biggest lambs were 10 kg lighter than usual. All the lambs were smaller, but of a more similar size; in fact there was less than 5 kg difference between them. The answer came by handling the ewes. Some had kept themselves at the expense of their lambs, whilst others had given 15 -20 kg off their backs. Whereas there was less than 30% variation in the weight of **each** lamb there was a 300% difference in the **total** weight of lambs reared by the ewes. The Bonds changed from choosing by size to managing numbers reared.

Derek explains that 'We now use the total weight of lamb reared as the best measure of performance, since it combines into one figure the important factors of prolificacy, ewe milkiness, and lamb growth. It sounds hard but we leave the triplets on the ewes, and find losses no higher than before, bottling those which drop off with no credit to the ewe.'

'We now place only **minimum** values on birth and 56 day weights, and select replacement yearling ewes weighing 60-65kg, since these make the right size ewes to produce lambs which finish at 40 kg. By tracking back through pedigrees we see which family lines always rear their twins and triplets to good weights. By culling for rearing ability rather than age we found some ewes with amazing longevity (28 lambs reared over 15 years).'

Derek & Olivia weighed their lambs in 2014 at 82 days and the average ewe reared 64 kg of lamb, ie the same as yearling bodyweight. 'There have sometimes been ewes rearing over 200% of

% Weight Ratio = 100*total Lamb Weight/Ewe Weight



bodyweight at weaning'.

The chart shows how actual total weights varied last year according to the proposed Society scheme.

The average weight ratio for ewes rearing singles, twins and triplets were 0.38, 0.61 and 0.81. The flock average was 0.60.

3.3 Flocks 809 and 1400 (Derek and Cindy Steen)

Derek and Cindy Steen run a 2500 ewe flock, including 1000 Lleyn. They have always recorded the performance of the ewes, manually for 20 years before they invested in Border Software in 2009.

The Steens began by *'finding out what we had and discovered that we had some mediocre sheep'* said Derek. They recorded the details of the dam and sire of every lamb born, together with the lambs' weights at 8 weeks. *'We identified the bottom 10% of those lambs and culled their mothers. That was when we saw a real improvement.'*

'When we started with Border Software we had already spent 20 years improving the flock so it was already high performance. It made further improvement more of a challenge.' However, there has continued to be a definite genetic gain. Over the 2010-2012 period, the 8-week lamb weights across the flock have increased by 2 kg. Twins now gain 350 g a day and singles 400 g, all without creep feed.

Derek is clear that *'up to 8 weeks, any gains are achieved solely from the ewes' ability to produce milk; after that it is down largely to forage. Recording allows us to identify the best performing ewes from 8 week weights and to use this as a guide to identify and select their progeny.'*

A large percentage of the Steens' land is rough grazing and, as Derek says, *'if we can't improve the land, we have to be careful to breed sheep that can convert the type of forage our farm will grow.'* Finally, Derek feels that *'It is the duty of people selling breeding sheep to performance record; it is something that we should all do to improve the national flock. No dairy farmer would AI his cows without knowing the breeding performance of a bull: it just wouldn't happen.'*

4. What Next?

In the first half of 2015, the Society will:

- discuss the Scheme with suppliers of on-farm software to see whether they could make the weight ratio calculations available as part of their offerings to Lleyn Breeders;
- produce Society-specific software for those that don't have on-farm software;
- agree a name and logo for the Scheme (which will be used in advertising and for display at Society Sales);
- produce articles and promotional literature to promote the value of the Scheme.

The Society sees the Scheme as an important and integral part of promoting the breed. Our breed is unique in being able to offer such a package of quality assurance for buyers.

**FLOCK
BOOK**

**SOCIETY
PERFORMANCE
SCHEME**

**RAM
INSPECTION**

**INSPECTION OF
FEMALES AT SALES**

Please do not hesitate to speak to a member of the BD committee if you would like to know more about this Scheme. Please let Heather Stoney-Grayshon know if you are interested in taking part in the Scheme in 2015.

John Adams