The GEORGE Farm Vets

September 2023

Using data to drive management decisions and improve productivity

After two successful sheep benchmarking meetings recently and with the start of the tupping season fast approaching, now seems like the right time to highlight how important record keeping and data collection can be.

It is easy to let the number of disease cases and losses go by unnoticed without proper data recording. It is also difficult to highlight problem areas which may be significantly impacting on profitability and those areas which may require veterinary intervention.

Collecting data allows us to form a baseline to monitor progress made within the flock year on year as well as benchmark farms against each other. Benchmarking is a great way of comparing your performance with other farms who operate in a similar way to your own and allows you to set targets **which are achievable.**

Pre tupping

This is a key time to assess each individual ewe to ensure she is fit for the next breeding season. As well as carrying out a checklist for physical traits it is just as important to look back on data about individual ewes to see if they've had previous issues over that year. It is worth culling out ewes if they have had issues. Good record keeping stops these ewes from becoming repeat offenders.

Reasons to Cull

Physical traits	Previous issues
Low BCS	Barren, abortion
Broken mouthed	Poor mothering ability, low milk production
Lameness	Mastitis
Age	Prolapse, difficulty lambing, caesarean
Poor udder conformation	Lameness

Scanning

Assessing scanning data can be useful to identify issues which can go by unnoticed in many flocks. Scanning data is relatively easy to compile and gives a general indication of overall flock health.

A poor scanning % can be indicative of many problems which could include:

- Sub fertile rams
- Infectious disease
- Poor nutrition
- Trace element deficiency
- Lameness
- Iceberg diseases such as Johnes, Maedi Visna etc.

		Flock 1	Flock 2
Tupping	Number of ewes put to the ram *Ewe lambs should be recorded as a separate flock*		
	Number of rams used		
	Number of lambs scanned in the ewes		
	Number of empty ewes at scanning		

Source: AHDB

Lambing

This can be a difficult time to collect data so keep things simple; better to collect a few data parameters well rather than overcomplicating things and giving up half way through lambing.

Some key parameters to record:

- **Number of ewes empty at lambing** - lambs lost from scanning to lambing
- **Stillbirths-** number of lambs born dead or die within 24 hours (useful to also state if single/twin/triplet and likely cause e.g. difficult birth, prolapse)
- **Number of assisted births**- any ewes which required intervention at lambing

Additional parameters:

- **Birthweights** (single/twin/triplet)- a good measure of ewe nutrition pre lambing, can also be useful to record if lots of cases of dystocia
- **Colostrum quality**- a useful parameter to record if there has been a higher than expected lamb mortality. Easily measured on farm using a Brix refractometer and a small sample of colostrum. Aim for above 26.5%.

Lambing to finishing

Profitability is driven by two main factors during this period; lamb losses and growth rates. It is important to break down lamb losses into ages as this will help pinpoint specific issues.

Where possible it is also useful to record the reason for death e.g. watery mouth, Pasteurella.

Tracking daily live weight gain provides a consistent metric for monitoring the development of your lambs. It can be useful to link this metric to any changes in nutrition or treatments to see how they affect productivity.

		Number lost	Cause of loss
LAMB LOSSES	24 hours to turnout		
	Turnout to weaning		
	Post weaning		

It also allows you to see which rams are producing the best performing lambs. Where possible weigh lambs as often as possible and tie in with other husbandry procedures such as worming/drenching.

Lambs not reaching industry targets of 20kg by 8 weeks or a DLWG of 150-500g (based on farming system) are likely to be suffering from health issues which are limiting their productivity.

Table 6: Growing lamb key performance indicators (KPIs) and related health issues

KPI	Health issues relevant to KPI
Eight-week weight (a measure of ewe performance and potential lifetime lamb performance)	Ewe milking ability; incidence of mastitis; presence of 'iceberg' diseases; target birthweights; neonatal disease; parasite challenges (coccidiosis, nematodirus, parasitic gastroenteritis)
Daily live weight gain • driven by ewe milk production but affected by lamb disease up to eight weeks • After eight weeks driven by availability and quality of nutrition but affected by disease challenges	Available nutrition; parasitic gastroenteritis (use of FEC); trace element deficiencies; lameness; clostridial, pasturella and mycoplasma infections

Best wishes,
Zoe

It is easy to feel overwhelmed by the amount of data which can be collected. However, starting with just a few parameters this year and making one or two management changes on the back of them can lead to a significant improvement in the health and productivity of the flock.