

ABOUT SHETLAND MONITOR FARM

Farm name	Bigton Farm, Shetland Monitor Farm
Meeting Number	15th
Meeting Date	Saturday 17th August 2019
Next Meeting	Sunday 13th October 2019
Report date	Friday 6th September 2019

Kirsty and Aimee Budge are our Shetland Monitor Farmers, at Bigton farm on the south west of the Shetland mainland.

Land: Two units are run together, covering 305 ha of in by and rough grazing.

Crops: Around 25 ha of spring barley is grown, 4ha of forage rape and about 40ha of silage cut.

Cattle: 82 Shorthorn x Saler cows producing Saler or Charolais x calves which are sold store or finished.

Sheep: 350 Shetland x Cheviot breeding ewes which are put to a Suffolk tup. Replacements are bought in.

Management group members are:

Jamie Leslie (Chairman): Scholland Farm, Graham Fraser: SAC Consulting, Kirsty Budge: Bigton Farm, Aimee Budge: Bigton Farm, Lauraine Manson: Hestigarth, Walls and Shetland Livestock Marketing Group, Hilary Burgess: Quendale Farm and Shetland Animal Health Scheme, Eric Graham: Gremista Farm, Jim Tait: Shetland Vets, John Abernethy: Verdahill, Twatt, Johnina Henderson: Breckon, Yell, John Sandison: Parkview, Bigton, Aaron Sinclair: Sandlodge Farm, Jacob Eunson: Uradale, Matthew Westmoreland: Hoversta, Bressay



23 farmers and crofters came along to hear Philip Skuce, who is an eminent research scientist with the Moredun Research Institute and Hilary Burgess, who was representing both the Shetland Animal Health Scheme and the local Shetland Agri-Environment Group.

KEY MESSAGES

- Test livestock for liver fluke before treating and 'risk assess' your farm
- Treatment and quarantine of livestock imported into Shetland
- Environmental Management

FARMERS UPDATE

Kirsty and Aimee gave an update of what had been happening on the farms this year and presented figures for their 2016 to 2019 calving and their 2014 to 2019 lambing.

Their herd size has risen from 69 in 2016 to a current 82 in 2019 and, over the same period, their rearing % (calves reared/cows bulled) has risen from 78% to 93%

For the sheep, the scanning and weaning results have been more variable. 2014 was a good year, scanning at 169% and weaning 131%. The scanning % dropped to 156% and 157% in 2015 & 2016 with 114% and 109% weaned in those respective years. 2018 saw a return to a higher scanning % of 169% and, with reduced lamb losses, the weaning % rose to 152%. The reduction in lamb losses was at least in part due to reducing the number of sheep put to St Ninian's Isle where losses of lambs around the cliffs can be difficult to prevent.

In 2019, although the mature ewes scanned at 178%, a larger than usual number of gimmers being introduced to the flock scanning at 119% was part of the reason the weaning % fell to 128%. A poor snap of weather at lambing time also increased losses around that time.

AREAS OF DISCUSSION



Undersown Tyne Barley

Philip Skuce PhD, Moredun Research Institute

With the weather due to deteriorate during the day it was decided to start the day with a tour around Bigton Farm in particular to search for mud snails. First stop was to see the undersown barley and a clover rich sward being grazed by lambs. Some fields of barley on the farm are lodging to a fair degree but the undersown barley received less nitrogen and being the short straw variety Tyne and so far it is standing well.



Suffolk Cross Lambs

The lambs were grazing new grass undersown in 2018 which now has an excellent clover content that should be allowing the lambs to achieve high growth rates.

Liver Fluke



We then went on a hunt for mud snails that are the essential intermediate host in the transmission of liver fluke to sheep and cattle. Philip explained the type of habitat they can be found in such as wet hollows in fields, poached areas around troughs and gates, water filled hoof marks etc. We failed to find any mud snails on this occasion and headed back to the farm buildings to shelter from the rain and for Philip's presentation. Their brown colour, can make them very difficult to find.

As a result of feedback from the abattoir, Bigton Farm are aware that their cattle are sometimes picking up liver fluke but they suspect that it might mostly be when the calves are young and running with their mothers at the other farm Toab. However, in the past they have also had liver fluke reported in cattle that spent their entire lives at Bigton.

Fighting Fluke in Sheep and Cattle – presentation by Philip Skuce PhD

Philip gave a very comprehensive presentation about the life cycle of the liver fluke and about how **“It's all about the snails...”** In the UK, liver fluke intermediate host is Galba (formerly, Lymnaea) truncatula, the ubiquitous Dwarf Mud Snail.

He explained the possible cost of liver fluke to UK farmers:

- Direct production losses: – 10% reduction in adult LWG; 30% reduction in lambs/calves; poor scanning rates, reduced feed conversion ratios etc.
- Estimated cost to the producer:
 - EBLEX, 2011 - £25-£30 per head (sheep)
 - Swiss study, 2005 – 300€ per head (beef & dairy)
 - Harbro Ltd., 2013 – ~450,000 cattle, ‘fluky’ animals ~2.5kg lighter @£60, also 27 days older!
 - Inability to control fluke on a sheep farm in SE Scotland (AR) = ~£20, 000 total (RDSVS, 2011)
- Livers condemned at slaughter - routinely, ~10% for sheep, ~25% for cattle

Philip covered recent trends in liver fluke disease with climate and variations from year to year having a major impact. He also illustrated that liver fluke was now showing up in dryer regions further east in the UK than had historically been the case.

What’s changed

- The climate/weather patterns – warmer, wetter summers and milder winters, longer grazing = parasite seasons, more extreme events e.g. flooding
- Drug resistance – specifically to triclabendazole (TCBZ), drug of choice for acute fluke, esp. in sheep
- Animal movements – to/from farms & markets, out-wintering etc., especially without effective quarantine treatment on arrival
- Agri-environment schemes – wetland restoration e.g. wader scrapes for wetland birds; protected habitat for natterjack toads etc. – require to be grazed

Philip also covered drug resistance and making best use of the limited available Flukicides and gave a Practical fluke control 4-point plan

- 1. Pasture protection** - don’t let the snails get infected!
- 2. Reduce snail population** - drainage, topping rushes, improving poached areas etc.
- 3. Avoid high cyst challenge** - graze animals away from known/suspected high risk areas
- 4. Strategic treatment of ‘at risk’ animals** - treat animals at right time and with the right product!

Philip’s full presentation will be available on the QMS Monitor Farm Hub and he also provided a link to a New “Fight the Fluke” animation, which is part of the Moredun’s excellent animation series. It can be found by following the link below:

<https://www.moredun.org.uk/foundation/outreach/animation-series>

Rumen Fluke

- Eggs started to appear ~2000s, look very similar to liver fluke eggs
- Clinical signs include anorexia, non-responsive diarrhoea etc. – fatal cases reported in UK sheep & cattle in 2012 – thankfully, clinical cases still v rare!
- **How common is it?** Current reports...
 - 64% cattle; 41% sheep (AFBI NI), ROI ~75% sheep, less common on mainland(?) – 61% in Welsh cattle!
- **How important is it?** – depends who you ask!
 - adults well tolerated on rumen surface, disease invariably associated with large numbers of immatures in intestine

Adult fluke on the rumen surface



So far this disease has not been identified in Shetland, but has anyone been looking for it? Rumens are not usually opened at the abattoir in Lerwick. Compared to many of the livestock farmers Philip speaks to on the mainland, he thinks Shetland is in a pretty good place regarding fluke. It is found in certain areas, but the incidence is much lower than on much of the mainland (triclabendazole still appears to be working!), and we don't appear to have rumen fluke in Shetland(yet!).

Hilary Burgess, MRCVS BVM&S MA

Hilary explained what happens in Shetland to help reduce the risk of bringing in disease with imported livestock including the risk of importing triclabendazole resistant fluke.

Disease / Treatment	Isolation time	Re-testing	Extra information
Sheep Scab Treated with dectomax at pier	14 days	None required	Loose wool tags can be infectious
Quarantine worm Drench Treated with Zolvix at pier	2 days inside	None required	Put out onto dirty grazing (previously grazed by sheep that season)
Enzootic Abortion of Ewes (EAE) Tested at pier. (females only)	Essential to be isolated through first pregnancy and lambing in Shetland	After first lambing	Also test if empty or abort
Maedi Visna (MV) Tested at pier	Until clear test results received	6 months	MV becoming more common in mainland flock
Caseous Lymphadenitis (CLA) Tested at pier	Avoid close contact with other sheep (box feeding/housing etc.) until at least re-test clear	Advise private testing 6 weeks post import. Scheme funded 6 months post import	Check regularly (at least every 2 weeks) for any abscesses – particularly around head and neck area

Fluke

Advise quarantine fluke treatment using Closantel (Flukiver). Two treatments 6 weeks apart to reduce the risk of introducing triclabendazole resistant fluke to your flock. Ideally also avoid grazing imported sheep on pastures which are high risk for fluke for one month after first fluke treatment.

OPA (Ovine Pulmonary Adenocarcinoma or Jaagsiekte)

Look out for breathing problems, increased panting during gathering, watery discharge from nose or sudden death. Contact vet to investigate. Some infected sheep if you lift their hind legs, head down, large volumes of clear fluid will flow out of the nose (wheelbarrow test).

After an excellent BBQ provided by the Budge family, Hilary put on a different hat and explained what the **Shetland Agri-Environment Group** were doing.

Currently they are looking at the possibility of a change of approach making future environmental schemes “Outcome-based” rather than the current prescription type approach.

Hilary handed out a questionnaire that the group are using to gather the views of Shetland famers and crofters about their experience of past schemes and what future schemes should be trying to achieve. A good proportion of those present completed the questionnaire on the spot. The next step is to hold a public meeting to explain how such “Outcome2 based scheme have been used to good effect in Ireland:

ACTIONS FROM MEETING

- Fluke control has become a year-round issue...
- Make best use of all available information so you're making informed decisions!
- Consider management options (e.g. drainage & fencing) and, if you need to
 - treat, use right drug at right time on right animals at right dose!
- Don't forget quarantine treatment of new/returning stock!
- Work with your vet and AH advisor to devise sustainable fluke control strategies
 - tailored to your individual farm, because every farm is different!

FACILITATOR CONTACT DETAILS

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