FARMER LED, FARMER DRIVEN

STRATHSPEY MONITOR FARM
NUTRITION PLANNING REPORT
AUTUMN 2023

Nutrition planning for the suckler herd and calf growth rates

BACKGROUND

In Summer 2023, Karen Stewart, SAC Ruminant Nutritionist compiled a Specialist Advice Report on nutrition for Malcolm Smith's autumn and spring calving herds and on calf growth rates.

The suggestion is that improvements in nutritional management could help enhance the farm's overall cattle herd performance.

This summary focuses on:

- the impact of grass quality and growth on cattle performance
- the importance of measuring and analysis for decision making
- the fertility of the suckler cows
- the growth rates of the spring born calves

BULLS AT GRASS Auchernack's bulls go out with the cows. 2023 figures show 40% of spring cows calve in the first 3 weeks, lower than the target 70%. The bulls may be taking time to adapt to an outside diet and change of routine.

Recommendation: Turning bulls out 14 days before the cows should encourage quicker bulling activity and greater fertility through fitter bulls.

SPRING CALVING COWS AT GRASS

In summer the Smiths rotate their suckler cows when grass gets low, resting fields, which works well to utilise poorer quality grass on annual rental pastures.

In August through to October as grass quality declines, grazing needs to be carefully managed but with good grass management the season can be extended.

THE NUMBERS

- 54 autumn calving cows went to the bull in 2022 (83% calves reared)
- 108 spring calving cows were bulled in 2023
- Spring calves gained on average 0.8kg DLWG and up to 1.0kg DLWG.

CREEP FEEDING

Recommendation: Creep feed Auchernack calves, where pasture quality is poor or grass is short, for 8 weeks prior to November weaning. Forward creep grazed calves can bring advantages of "self-weaning" and better calf nutrition.

SILAGE PITS

The Smith's cattle are fed from two pits, one at their rented (Congash) farm and one at home. The Auchernack pit has a wide face (originally 2 smaller silage pits) and this is likely to be affecting keeping quality.

The home pit takes the 2nd cut silage. 1st cut silage goes to the rented Congash farm and normally runs out in February. All cattle are then fed from the home pit.

Note: Different silage quality between 1st and 2nd cut makes accurate diet planning essential.

SILAGE QUALITY

In 2022, the silage dry matter, energy levels were all around 10MJ/kgDM, an average to low energy ration, fine for suckler cows but limiting for youngstock.

Recommendation: Consider cutting silage earlier to improve its energy for youngstock. This potentially reduces concentrates and improves intakes of forage for the youngstock where rapid weight gains are sought.

Silage and Bloods

Silage results from 2022 taken in April 2023

	Congash Pit	Top of Auchernack Pit	Bottom of Auchernack Pit
Dry Matter (DM) g/kg	375 (38%)	443 (44%)	225 (22%)
Metabolisable Energy (ME) MJ/kgDM	9.9	9.9	10.1
Crude Protein (CP) g/kgDM	96	124	185

The bottom of the Auchernack silage pit has twice the water content of the top.

A 25kg fresh weight ration from the top of this pit has 11kg of dry matter but only 5.6kg from the bottom. Protein levels show large variation.

Recommendations:

QUALITY

- Measure **quality** and tailor your ration.
- Analyse the silage seven weeks after the two pits are sealed. Analyse again when there is a change in silage quality e.g. 2nd cut to 1st cut.
- Analyse your barley rations too – there can be wide differences in protein values.

QUANTITY

- Measure your pit size and bale numbers to calculate winter dry matter forage. Without this it's impossible to plan a whole winter ration.

CREATING RATIONS

Create winter rations with your nutritionist for all stock types; revisiting when there are significant changes in ration such as at housing, 6 weeks pre-calving, and when there are changes in silage quality.

BLOOD TESTING 2023

Blood tests taken 1 month pre-calving in spring showed that cows had very high Non-Esterified Fatty Acid (NEFA) levels: cows were in a negative energy balance.

- This shows that the suckler cows are using their own body fat at a high rate pre-calving and this can impact their ability to get back in calf.
- The heifers were all low in blood urea levels and cows marginal, indicating low protein in their ration.

Recommendations:

Work out levels of silage fed and straw incorporated for 2024 calving and monitored carefully.

Monitor rationing and seek advice at least 6 weeks pre-calving.

Autumn suckler cows

AUTUMN SUCKLER COWS

- At Auchernack, autumn cows and calves are outside until weaning.
- The calves are weaned at the beginning of November.
- These cows are then housed for winter and are rationed on silage and straw pre calving.
- First calving usually starts a week or so after housing, mid November for a nine-week period.
- After they have calved, they are offered 1kg barley per head along with ~35kg silage.
- The cows and calves are turned out at the start of February, to a 40-acre wooded area, at which stage the calves are introduced to creep feed.

MINERALS

Auchernack cattle are fed a pre-calving mineral and the quantity fed should be decided when rations are worked out. For the size of the cows and the ration being fed an allowance of 120g/head/day should be adequate.

Recommendations:

Udder and mammary recovery time is quite short. This may also negatively affect colostrum production the next calf.

- Consider weaning autumn cows a few weeks earlier to allow good colostrum production for the first calves born.
- Have a pre-calving ration worked out. Note that feeding straw alone is not sufficient and can cause issues due to energy and protein deficiency and poor colostrum quality for the calves.

Spring Born Calves

Timing	Spring 2022 born calves	
Weaning (November)	Average 293kg (0.98kg/hd/day)	From older cows (Sim cows to Lim bulls)
	Average 247kg (0.80kg/hd/day)	Average aged cows
	Average 230kg (0.73kg/hd/day)	Heifer calves, easy calving bulls
	Average birthweight 45kg, average weight at weaning 256.6kg Gained 211.6kg over 252 days (36 weeks) = **0.83kg/hd**	
9th January	299.8kg	Gained 43.20kg/head over 49 days (7 weeks) = **0.88kg/hd/day** (299.8 – 256.6kg)
End April at sale	386kg	Gained 86.2kg/head over 109 days (15.5 weeks) = **0.79kg/hd/day** (386 - 299.8kg)

Spring born calves - Improving Liveweight Gains

The table above shows the weaning weights for the spring born calves. Weight gains are lower than hoped.

Karen suggests that with the cattle breeds and with the cows and calf type Malcolm could be expecting at least 1kg/day from birth.

Malcolm believes this is a realistic target.

After weaning, weight gains are around the 0.8kg/day which is low considering they are on 3-4kg of concentrates/day.

Recommendations:

- Use the silage analysis to work out rations. Close monitoring of the rations and availability to the calves should help to get these weight gains to 1kg or more.
- Although heifer calves tend to show lower growth rates than steers, this too could be improved by identical ration planning.
- Overall, focus on times where nutrition is likely to be a limiting factor.

Key Messages

1.Ration in winter according to the silage in use and monitor rations throughout the winter months. Have these worked out and monitored by nutritionist.

2.Use information on scanning and weights of calves for their age (adjusted to 200 days) from grass to determine if there is an issue in some grazing areas.

3.Report findings to vet and nutritionist to make a plan.

4.Focus on backend-time nutrition for calves

Thanks to Karen Stewart, SAC Consulting, and The Smiths at Auchernack Farm for the information and this summary of their Specialist Advice Report.

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