Peter Cook
P & L Cook and Partners

SAOS
Developing co-operation in farming, food and rural scotland

Cairngorms Monitor Farm

A & J Adams
Eastfield Farm
Ballater
Aberdeenshire

Report on Meeting held Tuesday 18 November 2008

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CAIRNGORMS NATIONAL PARK AUTHORITY
ÙGHDARRAS PÀIRC NÀISEANTA A' MHONAIDH RUAIDH

QMS QUALITY MEAT SCOTLAND
representing the Scottish red meat industry

In partnership with Scottish Enterprise

The Scottish Government

TOP TIP FROM THIS MEETING

1. A cow starting the winter with an extra unit of condition score, can save at least one tonne of silage. Trials show that cows one condition score too thin at bulling produce 17% less calves. Managing a cow's condition is vital to ensure good physical and financial performance. Feeding levels need to be varied at different stages of the production cycle.

2. Stubble neeps following a cut of silage, is an option for outwintering cattle; given the right conditions sowing seed direct on to the short burnt off sward can provide as good a crop as direct drills and cultivations.

3. Even with the prospects of low barley prices next harvest, it is still worth growing sp. barley for straw and own feed in upland farms.

1. INTRODUCTION

There was a good turnout of over 30 members at the meeting. Peter Beattie from QMS (who are the main funders and project managers) was present, having recently replaced Johnney Mackey.

Programme;

1. Cow Conditioning scoring practical
2. Stubble Neeps establishment trial
   Lunch Ballater Hall
3. Update from Monitor Farmer – herd performance
4. Group exercise – spring barley? Finish v. Store?
5. My farm – John Matheson

2. CONDITION SCORING COWS

Ian Pritchard, SAC Beef & Sheep Specialist, based at Thainstone provided an overview on the value of condition scoring cows. There was also a practical session for the Group to assess 5 cows.

Key Points:

Profitable suckler cows are based on:

- Producing a calf per cow per year
- Compact calving
- Adequate milk
- High calf performance
- Use the right breed and crosses

Reasons for high barren cows?

- Cow condition – the feeding
- Disease
- Bull fertility
- Affect from previous calving

- Age – fertility declines after 8/9 parity
- Management of heifers

Reasons for spread out calving – slow to take to bull

- Previous calving
- Feeding - nutrition
- Bull power
- disease
- management of heifers
- difficult calving

Livestock diets have a major bearing on performance and fertility. Important to know the value of silage /hay so getting it analysed is worthwhile.

A cow's diet should ensure:

- produce viable calf
- healthy cow
- good reproduction
- produce milk
- All at least cost

The importance of having cows at the right condition at different stage of production was discussed. The following targets were suggested.

Condition Score Targets

	Spring Calving Cows	**Autumn Calving Cows**
At calving	2.5	3.0
At service	2.5 – 3.0	2.5 – 3.0
At housing	3.0+	
At turnout	2.5	2.5

Relationship between body condition and reproductive performance (MLC, 1980)

Herd Average Condition Score	**Calves weaned per 100 cows**
Below 2	78
2 – 2.5	85
2.5 – 3	95
Over 3.5	93

Have to be careful if very fit (fat) cows → more calving problems, assisted calvings and deaths. Important to adjust cow condition at different times of year.

Producers should split herd into 3 groups (fat cows, average cows, thin cows) if possible to manage condition and to make better use of feed same total amount of feed, just allocated differently).

1 body condition score = 13% Liveweight → ~ 80 kg wt (600kg cow)
1 kg weight loss = 23-36 ME
So can save 2,400 MJ or 20kg barley, or 1t of silage.

Relationship between cow condition and incidence of assisted calvings (MLC ,1984)

	Body condition scores				
	2.0	**2.5**	**3.0**	**3.5**	**4.0**
Breed	**% assisted calvings**				
HXFr dam, Ch bull	6.7	7.7	8.0	10.1	14.3
Blue Grey dam, Ch bull	4.0	5.9	6.3	7.0	10.1

3 ESTABLISMENT TRIAL STUBBLE TURNIPS

The Group viewed a 20ac field which had been silaged first then sprayed with roundup before sowing in mid-July. Four treatments were used:

1. Plough , roll, sow, roll
2. Disc, roll, sow, roll
3. Sow direct on to burned off grass, not rolled
4. Moore direct drill, not rolled

The aim was to explore a low cost outwintering feeding system for autumn cows and their calves.

There was no visible difference between the first 3 treatments, only the Moore direct drill looked poorer being patchy in places – suspect too deep. Clearly sowing straight onto sprayed grass without any cultivation was cheapest and best option this year. Also gives a firmer base for cows so less poaching than if plough and sow.

40 autumn calvers and their calves will be wintered on the neeps (20 ac). Currently moving the fence every day approx 10 feet. Also feeding silage in a barrier cart and straw. Calves also getting creep. Alan noted that the cows were unsettled when first went on to the neeps, now got used to them. Still a bit of wastage, not cleaning up all the bulbs. Group suggested a smaller break each day to reduce trampling.

Summary of Stubble Neep system:

Pros	Cons
Route to replace poor grass – tansy, dock control	Loss of grass production
Simple system	Shifting the fence on a

	sleety day
Outside healthier for stock – some suggested no need for pneumonia vaccine	Must be a free draining field
No need to spread FYM	The economics? Cost of neeps versus cost of a second cut of silage.
Rabbits not keen on stubble neeps	Impact of frost on the neeps?
Save bedding straw	Risk of choking

4 Alans Update

4.1 Harvest feedback – see handout attached.

Very good yield from feed variety Waggon. A good growing year for normally dry Deeside. Oxbridge not a great yield and was rejected for malting due to high N.

4.2 Herd Fertility – see handout attached for spring and autumn herds.

Lot of discussion round these figures. What is target? 95% calving % from cows put to bull. National average however is closer to 85%.
Alan's figures complicated by pre 96 culls and Johnes reactor culls – need to look at non culls performance.

Conclusion:
1. Calving % below the 95% target. Next step is to identify reasons for empties and deaths. Is there a pattern or clear reasons?
2. We all need to do the figures – first step in identifying probs and improvements.
3. There is a cost versus performance issue – is overall profitability correlated with high technical performance if it needs a lot of fixed cost (labour)?

5 Group Exercise

The Group were asked to help Alan with two imminent decisions.

5.1 With spring barley budgeted production costs above market prices, should Alan change his spring cropping plans?

What is the cost of growing spring barley?

	£/acre
Home saved seed @ £150	12
Fertiliser 2. cwt Nitram @ £350	35
Fertiliser 2 cwt compound £500	55
Sprays	20
Sundries	5
Machinery (stubble-stubble)	100
Rent	35
Total Costs	**£262**

Cost per tonne:

Yield	**2.0**	**2.2**	**2.4**
Cost / tonne	**£131**	**£119**	**£109**

Groups' Comments

- Doesn't take into account high value of straw for upland farm = £10/ bale (delivered price)
- Few alternatives to sp. barley for upland farms – oats too late
- Growing sp barley allows flexibility to cut for arable silage in dry year when short of grass
- Could maybe grow more grass and let for grazing
- Upland farms need barley for the straw and own feed, so next years area should match requirements
- Consider low cost barley – min inputs
- Doesn't seem worth risk to go for malting, stick to feed varieties and max yield. Alan found that Waggon yielded much higher than Oxbridge.
- Barley prices may rise next season!

Conclusion: Stick to rotation and grow feed sp. barley as planned (Waggon)

5.2 Should Alan store his spring born calves or 'push' and try and finish?

Groups' Comments:

- Pick out the best – sell them store and finish the tail end group.
- Sell all as forward stores 450kg onto grass
- Forward store the Angus crosses
- Remember this is a one man system
- The value of the barley is important
- Alan has plenty barley so can play the market
- A quick costing by the group showed that there was a margin in taking the calves through to a forward store stage for sale in the spring – largely due to good store prices at present and the lower cost of feed barley.

Conclusion: aim to sell as forward stores to hit the peak prices in spring

6 MY FARM: DINNET ESTATES (John Matheson)

This is a new feature of the programme, where we invite a member from the Group to briefly describe their farm and systems. We believe there is tremendous merit in finding out what others do on their farms, to share experiences and best practice. To kick-off this session John Matheson, manager of Dinnet Farms agreed to describe his system.

Traditional Deeside Estate extending to over 24,000 acres covering a range of activities including, sporting (shooting & fishing), commercial forestry (7,700 ac), let farms, let cottages (80), and in-hand farm (Dinnet Farms).

Dinnet Farms extends to 1,290ac ploughable land, 1,000ac rough and 14,000ac of hill. There are 3 main steadings; Braeroddach, Clarack, and South Ferar. The farm is spread over 6 miles.

CROPPING

	Acres	
Sp Barley	200	Half sold for feed, rest retained own feed
Forage Crops	40	
Game Cover	40	
Rotational grass	600	
Silage	300	1 cut
Hay	100	
Rough grazing	1,000	
Total	**2,280**	

Main enterprise: 270 suckler cows; 200 autumn calving, 70 spring calving.
All calves sold as yearlings / forward stores at Thainstone approx 14 mths.
Cows Sim cross put to Ch and Lim bulls.
Calving outdoors, autumn calvers start August.
All cows outwintered in woodland. Weaned calves wintered in straw courts.
Easy feeding wintering system; split in groups of 30 cows, fed silage in barrier carts, bruised barley fed on ground, also some hay. Calves have access to creep feeders.
Healthy regime for calves – avoids need for pneumonia vaccine.
Buildings only required for overwintering spring born calves.
Buy-in 80 bulling heifers per year for replacements.
Vaccinate against BVD and lepto in Feb
Have problem with red water in cattle – tick borne disease. Need to acclimatise replacements to hill.

Labour: John plus 2 men.
Contractor: silaging, sowing one-pass, combining, and baling.

There is also a 1,300 BF ewe flock which is contract farmed. The ewes are used as 'tick mops' for the hill. Lambing % - 110.

Lessons;
Make best use of your resources – dry birch woods and sheer space
Healthy outdoor wintering – avoids some costs e.g. straw bedding, bedding time, dung, vaccines. Very little building cost.
Keep it simple.

7. Management Committee

The new Management Committee for the coming year is as follows:

- John Matheson
- Stephen Allardyce
- Willie Lawson
- Charles Gordon
- Duncan Keir

8. Date of next Meeting

The next meeting will be held in Wednesday 17th December 2008.

Appendix 1 - Farm Handout

WINTER FORAGE TRIALS

1. STUBBLE NEEPS

Establishment trial.
20 acre field burned off with roundup in July after cut of silage. Four methods of stubble neep establishment tried;

- Plough, roll, sow, roll
- Disc, roll, sow, roll
- Sow direct on to burned off grass. Not rolled.
- Moore direct drill. Not rolled.

Aim; Low cost cow wintering for 40 autumn calvers, healthier calves if outwintered.

2. RED CLOVER

Undersown in spring barley. Half made into arable silage, half combined.
Aim; Low cost cow wintering and extra soil fertility/ lower fertiliser cost.

3. SILAGE ANALYSIS

Only second cut tested (top layer of pit).
Analysis;

Dry Matter	20.8%
D value (digestibility)	62
ME (energy)	9.9 MJ/kg DM
Protein	13.3%
pH (acidity)	4.2

HAIRST RESULTS

Oxbridge (bought seed)	80 acres	150 tonnes?	1.9 t per acre @ 16% to 19% MC	Failed for malting – too high N. 2 cwt/ac N applied
Waggon (home saved seed)	80 acres	216 tonnes?	2.7 t per acre	2.5 cwt/ac N applied

	Approx. tonnes
Sold (£83/t)	30
In 2 bins	80
Moist tower	115
In pit	160

What do with the surplus of feed grain?