



FARMER LED, FARMER DRIVEN

DEESIDE MONITOR FARM

A summary of the Bull Beef Enterprise Specialist Advice Report By Karen Stewart, SAC September 2023



MONITOR FARM Scotland

Background

Duncan has been finishing Stabiliser bull calves as bull beef in an intensive finishing system at Womblehill Farm, Kintore.

This helps cash flow at an otherwise quiet time of year.

Calves from Meikle Maldron are currently castrated and sold store. Duncan is keen to improve the enterprise. He would like a greater understanding of the viability of the two markets for male calves and discover how to enhance the efficiency of the system.

Karen Stewart, Ruminant

Nutritionist for SAC Consulting, visited Duncan and compiled a **Specialist Advice Report** on the bull beef enterprise funded through Scottish Government. Her findings make up the bulk of this summary report.

Bull beef challenges

More castrated beasts would allow Duncan to have a forage-based finishing system, grazing excess grass at Ingliston in the summer months. The drawbacks of the bull beef system is that all barley is purchased off farm, which is an additional cost to the system.

Homegrown barley would be a cheaper resource for the bull beef enterprise.

However, storage for feeding at Womblehill is a limiting factor.

BULL BEEF FACTS

Diet

- Weaning Mid October to mid January – Oats/peas/barley wholecrop and 1kg of barley (0.8kg average gain)
- Mid January to mid February Oats/peas/barley wholecrop and 5kg maxammon treated barley (1.96kg/day average gain)
- Mid February to slaugher— adlib maxammon treated barley, silage and straw both offered adlib* 1.8kg and 2.6kg average gains at weigh ins

*ad-lib silage offered along with the adlib barley may result in differences in the proportions each beast eats.

Cattle eating too much barley and silage with no straw to help rumen function may develop sub-acute rumen acidosis, affecting weight gains.

Adlib barley and straw only is advised for more consistent ration and consistent weight gains.

Duncan rears his pure breeding bulls on a 100% forage diet.

Notes

A conventional cereal-based system doesn't fit with Duncan's ethos or the rest of the farming enterprise

He does not grow cereals so reliance on purchased cereals and their volatility is a major weakness.

The main target is reducing or eliminating concentrate use and hopefully increasing margin while reducing risk & volatility.

COMPARISONS

Karen created gross margin tables to compare Womblehill's winter

2022/23 performance, with expected gains from a conventional

barley beef system and an example of a longer keep forage-based finishing system. Key here is the higher weight gains expected from the conventional system, from weaning in October through to January.

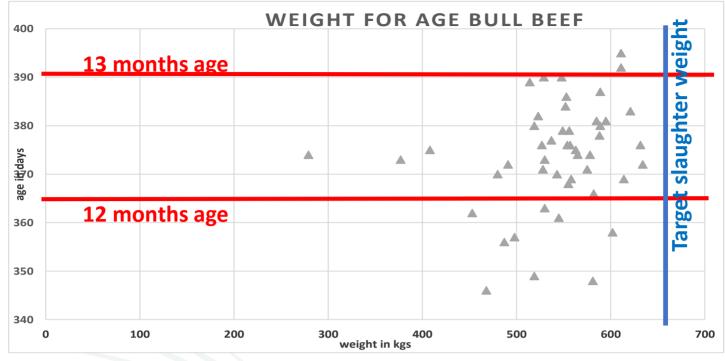
Scotland

Note that the barley price plays a huge role in the cost of the barley beef system. Karen used the 2022 barley figure of £300/t.

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Purchase of calf			600.00		250kg at weaning @240p/kg
		Total cost/head	1159.70		
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Bull beef weight for age analysis - 29.04.23





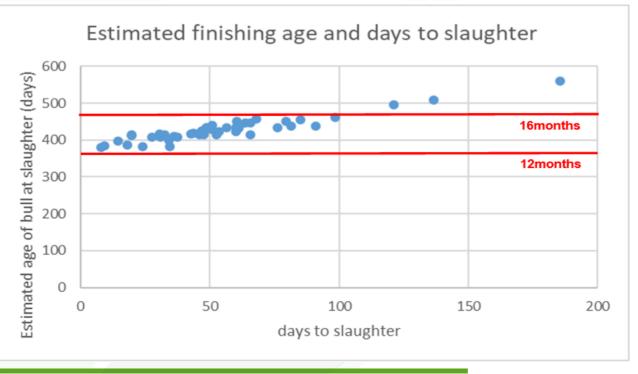
For Duncan's bull beef system, the target slaughter age is between 12 and 13 months. The target slaughter weight is 650kg. See the chart above.

The triangles represent the weight and age of Duncan's bull beef animals on 29th April 2023.

Karen suggests that earlier weight gains would have moved many beasts shown within the 500-600kg weight band closer to the ideal weight for slaughter.

TIME TO FINISHING

Charting the figures below indicates that the bull on the left will be just over 12 months old at target weight, reached in approximately 10 days. Others will be closer to 16 months old. For some lighter beasts, in late April, this target weight was still over 75 days away.



Thoughts on bull beef:



2022/23 – Karen's observations

Over the 3-month period from October to January bulls averaged 0.8kg/day on an adlib forage ration of oats/barley/pea wholecrop with 1kg of barley.

• The diet cost is 98p/day

Karen suggests an extra 3.5kg/day of barley (but less wholecrop) could increase DLWG to 1.4kg, an average 54kg heavier by late April, bringing the slaughter age down.

• The diet would cost187p/day; an extra £80/head over this 90-day period.

Duncan weighs his bull beef regularly. This allowed Karen to note that in mid-January, an increase to 5gk/day maxammon treated barley along with the adlib wholecrop brought significant weightgains. 80% achieved over 1.5kg DLWG. Then a transition to ad-lib barley to the system with adlib silage reduced some

animals' weight gain. 71% achieved over 1.5kg DLWG.

- It is possible that adlib silage reduces appetite for high energy barley in some beasts.
- Karen suggests adlib cereals and straw only after a transition period.

Duncan's 2024 planning

Duncan utilises compensatory growth in the spring when the bulls hit high quality grass after modest growth through winter.

- This sets them up for a healthy life as a breeding bull.
- Duncan thinks it could work with the finishers too.

In 2022 and '23 some bulls which have not made the grade for breeding bulls have finished with good weights and grades as they approach 16 months. Duncan sees a huge opportunity here for the finishing bulls.

In 2024, finishing bulls will be split into two groups.

• The heaviest 50% at weaning will follow the same feeding regime as his breeding bulls and finish at 15-16 months with little or no concentrates.

Whilst conceding 2-3 months on slaughter age, the compensatory growth should be able to substitute most of the concentrate use and some straw while spending less time indoors.

• The second, lighter, group will be treated in a similar way to last year.

If grass-based finishing works, there is potential to increase numbers in future years.

• It is important to find out at what weights range grass-based finishing is possible while working out what to do with the lighter bulls.



To find out more or to sign up, please contact:

Regional Adviser – Peter Beattie

07769 366614 pbeattie@qmscotland.co.uk monitorfarms.co.uk **Original report by:**

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