

Agricultural Advisory

Livestock Case Study



Improving herd efficiency and profitability through data-driven decision-making.A



monitorfarms.co.uk

While many farmers collect detailed performance data, translating that information into confident, financially robust breeding and management decisions remains a challenge.A

Monitor Farm Scotland is a four-year programme funded by the Scottish Government and managed by QMS and AHDB. With nine Monitor Farms located across Scotland, the initiative uses real commercial farms to test new approaches, share knowledge, and improve productivity, profitability and sustainability across the sector.A

SAC Consulting has been working with Monitor Farm Scotland since it began and recently collaborated with them on the challenge of using the right data to make the right decisions for the benefit of farm businesses.A

The customer challenge

At the Argyllshire Monitor Farm, hosted by Craig Archibald at Craigens Farm on Islay, the focus is on improving the performance and profitability of a 220-cow suckler herd operating within the constraints of an island-based system.A

Craigens Farm is a 2,000-hectare unit producing Angus and Charolais store cattle. The business had already begun transitioning towards a more efficient model, including increased outwintering and breeding more functional, moderate-sized cows suited to the system.A

Detailed data was already being recorded, including cow weights, calf growth rates, body condition scores and fertility performance. However, this data was not yet being fully utilised to inform breeding and culling decisions.A

The farm's objectives were clear: maintain fertility and longevity, produce quality store calves and replacement heifers and ultimately strengthen herd profitability. The challenge was to combine physical performance traits with financial data, particularly winter-feeding costs, to support more data-driven decision-making.A





Our solution

Through collaboration with Monitor Farm Scotland, the team at SAC Consulting worked to develop a practical, accessible tool to help suckler producers better understand herd efficiency, benchmark performance and strengthen long-term profitability.

Lorna Shaw, Ruminant Nutritionist at SAC Consulting worked with Craigens Farm to analyse herd performance, feeding systems and cost structures, and to translate complex data into clear, practical insight.

Wintering systems were reviewed and costed in detail. The herd was split between housed cattle and cows outwintered on deferred grazing. Feed analysis was undertaken to evaluate silage quality and quantify the contribution of draff and homegrown cereals. This allowed accurate winter-feeding costs to be linked directly to individual cow performance.

Using existing farm records, SAC Consulting evaluated cow liveweight, calf growth performance, feed and bedding costs. This data then allowed a margin over feed cost to also be calculated for each individual in the herd. The analysis revealed significant variation in efficiency between animals, highlighting opportunities for improvement that had previously been obscured within the overall herd averages.

To simplify decision-making, a clear traffic-light ranking system was introduced, identifying the cows of highest efficiency most suited to the system, acceptable animals retained where appropriate. Those that were deemed least efficient were unlikely to be retained for breeding. The herd was then strategically split, with top-performing females bred to maternal sires to strengthen core genetics, while lower-ranking animals were bred to terminal sires. This approach enabled structured herd improvement without excessive loss of breeding females.

The project has delivered measurable impact at both farm and industry level. At Craigens Farm, the review showed that cows best suited to the outwintering system generated approximately £184 per head more in overall calf margin compared to less efficient counterparts that were housed during winter. The work also challenged assumptions, identifying animals that were quietly high performing within the system while highlighting others that were underperforming financially.

To ensure the approach could be replicated more widely, SAC Consulting developed a 'Profitable Suckler Cow Calculator'. By combining expertise in ruminant nutrition, livestock systems and commercial farm performance, SAC Consulting translated herd data into practical action. The result is

a tool that is both innovative and accessible, designed to work in real-world farming businesses across the UK.A

The tool combines cow liveweight, feed and bedding costs, calf performance, sale value, and wintering system data to generate a margin over feed cost and an dam efficiency score for individual animals. Producers can compare management options such as housing versus outwintering, supporting more confident and informed decisions.A

Designed to be accessible and practical, the calculator was launched through a Monitor Farm Scotland webinar and made available as a free resource for suckler producers across Scotland. Feedback highlighted that it was clear, useful, and hit the mark for commercial farmers looking to think about costs, choose the right cattle for their system, and get the best efficiency from their herd.

By combining technical expertise in nutrition with practical farm knowledge, the calculator translates complex information into something farmers can act on in the real world.A

Added value

A key strength of the project was SAC Consulting's ability to turn complex technical data into clear, usable insight. By simplifying large volumes of data into actionable outputs, the team addressed a common challenge in the sector, where data is often collected but not fully used.A

A big part of the success also came from Lorna's farming background and experience, allowing her to build trusted relationships with those on farm. She took the time to get to know each farm, its people, and how they worked. By understanding the detail of each system, SAC Consulting could help create a tool that was realistic, practical, and grounded in everyday farm life.

This approach is especially valuable on more remote farms, like Craigens Farm on Islay, where access to independent, specialist advice is limited. Consistent, hands-on support helped made sure knowledge could be shared across the group and gave the farmers the confidence to implement the changes in a way that worked for them.A

Our customer says

"Drawing on her practical experience with Craigens Farm and other Monitor Farms, Lorna combined technical expertise in nutrition with a deep understanding of farm systems to help develop the calculator. By building strong relationships with the farmers, she ensured the tool was relevant, useable, and grounded in real-world practice, giving them the confidence to engage with their data and make more informed, profitable decisions."

Christine Cuthbertson,
QMS Monitor Farm
Regional Adviser