



Balancing business, the environment and family life

Maintaining the business bottom line with a focus on core organic farming values – and maintaining a work-life balance – are key objectives for one Dorset-based dairying couple. We spoke to them to find out more.

TEXT KAREN WRIGHT

First-generation producers Tom and Sophie Gregory are facing the challenges of modern-day farming head on. This year sees Tom pursuing more precision farming techniques to improve soil health on their 567-hectare organic arable and dairy unit, which is part of the Sadborow Estate in Dorset. And Sophie will embark on her Trehane-sponsored Nuffield scholarship, looking at the future of organic dairy farming in the UK. Their desire to become dairy producers stemmed from Tom, who cut his teeth growing up on a farm before training and working as a foot trimmer for 10 years.

Sophie admits she knew nothing about the industry but took a keen interest. They got their first opportunity to run their own farming business in 2014 in a shared partnership on the Dorset-based estate. Nine years on, and now in their early 30s, the couple run a 380-cow herd on 364 hectares and also manage a 142-hectare arable enterprise. They rear 100 youngstock for each year group, plus beef calves.

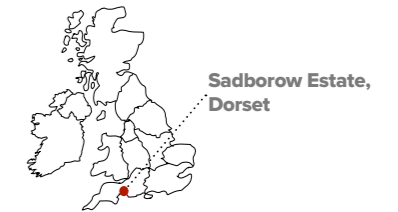
New techniques

Sophie, with help from two full-time staff, focuses on the dairy herd while Tom manages arable, forage crop and grassland production. Soil health and cow care are their priorities. They view these as the cornerstone of their success and are constantly seeking new knowledge and techniques to improve what they do. The Gregory's dairy herd was founded on cattle, of all shapes and sizes, bought from 50 herds in Ireland in 2015. "They were mainly Irish Friesians, but there were some Shorthorn, and New Zealand crossbred genetics in the mix," says Sophie.

Sophie Gregory:
"I'm really keen to encourage non-agri people into farming"



Herd owners: **Sophie & Tom Gregory**
 Herd size: **380 cows, plus 200 followers**
 Average yield: **5,200 litres, at 4.7% butterfat and 3.6% protein**
 Milk from forage: **4,420 litres**
 SCC: **160,000 cells/ml**



"We went to Ireland because the cows were bred for a similar system to the one we were setting up – a block-calved grazing herd." They have two blocks, with two thirds calving in eight weeks from March 6 and the other third calving in nine weeks from mid-August. "The calving pattern fits around our unit's facilities," she explains, hoping that they can expand the spring-calving herd 'at home' and find an opportunity to move the autumn calvers to a neighbouring unit. "Our farm is ideal for spring-block calving due to its mix of soil types, which includes some green sand that allows for early turnout and heavy clays that retain moisture. We can grow grass from March to October in a good year, and we look to graze, at least during the day, from March to November. But this is dependent on the weather."

Extra silage

To cover for eventualities they make extra silage each year, as insurance should the land dry up or wet conditions shorten the grazing season. "We know we need to be flexible and make sure we're well prepared. We don't want to have to buy silage. No one sells good silage, so you can pay a lot for poor-quality forage." Tom focuses on maximising soil health, which is key to maximising milk production from grass. Sampling is carried out at least every three years, often more frequently. And he also pays close attention to grass quality and grazing management. Grass growth is measured weekly, and any underperforming paddocks are improved. "We try to avoid ploughing and full reseeds, preferring to stitch in fresh seed," adds Sophie. "We've moved to using only herbal seed mixtures during the past two years so we're using species

like chicory and plantain that give a more even and extended growth pattern through the season. We've also increased the amount of clover in the leys." A paddock system offers cows fresh grass twice a day, after each milking. Around 85% of milk is produced from home-grown forage, with cows supplemented with a 14% protein concentrate in the parlour for most of the year, with this percentage only increasing if silage quality is poor and the ration requires balancing. Their annual average feed rate is one tonne of concentrate per cow.

Organic milk

The ration supports average milk yields of 5,200kg, at 4.7% fat and 3.6% protein, and the business sells two million litres of organic milk to Arla each year. But the management system is about more than yield. "We want a dairy system that makes best use of our resources and we'd ideally like to be self-sufficient for feed by growing crops for our own concentrate feed – that's something we're working on. Our target is to keep costs as low as possible and we monitor these through monthly Kingshay costings," she says. Key to achieving this, alongside producing high-quality home-grown feed, is breeding the right cows for the system and ensuring that herd health and welfare is tip top. Irish Friesian sires are used, although Sophie is encouraging Tom to look at other breeds to strengthen the herd. The priorities in dairy sire selection are fertility, feet and health traits. All their replacements are bred from the spring block, using sexed semen for the first 10 days of the breeding season on eligible cows and heifers. "We work out how many replacements we need and a few extras in case we have a bTB outbreak, and we only breed from those that make the cut. Any cows with recurrent foot problems, or high somatic cell counts, fertility issues, or any with



In-calf heifers: cattle are out wintered on herbal leys and big-bale silage

◀ Johne's infection are not bred for replacements. "And after 10 days, or as soon as we've used the sexed semen, we use beef AI for a further four weeks before putting in sweeper beef bulls – either an Aberdeen Angus or Hereford – for approximately two weeks." They're currently achieving a six-week calving-in rate of 92%, and an empty rate of 12%. Calf rearing is carried out by the whole team with replacement heifers turned out at a month old. They're outwintered on rolled barley and grass before calving for the first time at between 23 and 24 months old. Beef calves are sold locally, at two to three weeks old, with a few kept on to rear on some outlying grassland. Cows are milked twice a day through a 30:30 herringbone parlour, with pre- and post-teat dipping carried out at each milking. Herd somatic cell counts averages 160,000 cells/ml and the Bactoscan is 30.

Hard line

"We keep these figures under control and can see any offenders who may be pushing up the average in our NMR records. We avoid breeding replacements from high-cell-count cows," says Sophie. A hard line is also taken when it comes to Johne's disease control at Home Farm. "We bought in plenty of Johne's – 75 infected cows out of 350 when we started. So we were up against it. We were shocked at this level at the time." Sophie has learned a lot about Johne's since then. "I've seen cows with mastitis problems, fertility issues or high cell counts that often turn out to be Johne's positive. So while we may not ever see clinical Johne's cases, it is rumbling around and causing issues. But we've been really strict and it has paid off." Cows are screened for Johne's quarterly through HerdWise, as part of their NMR milk recording service, and any infected cows are not bred from. And if a cow turns positive when she's in calf she's

moved away from others before calving and her calf is removed and goes into the beef-calf group – even if it's a heifer. "In 2023 we only had 4% of cows with any Johne's infection – J2 to J5. Any cow with Johne's infection, however minor, is red tagged," adds Sophie. As an Arla producer representative, she embraces the farm assurance schemes and takes advantage of good herd records and their monthly costings to benchmark performance.

Regenerative agriculture

Planning ahead, she recognises that the increased awareness of regenerative agriculture and plant alternatives may have led to confusion and a lack of direction about organic. This challenge led her to apply for, and saw her awarded, a Nuffield scholarship in 2023. "I'll focus on organic dairying in my study, but I want to learn the broader lessons that surround the system. My goal is to find out where organic is thriving and where it's losing ground, and to bring back lessons that can be applied to the UK and to our own herd and business." Looking at the bigger picture is important to Sophie and Tom, alongside farming in a way that has a positive impact on the environment and community while maintaining a healthy bottom line. They combine this with a reasonable work-life balance that's needed to raise their three children aged five, 12 and 14, and to help others into the industry. "I am particularly keen to encourage those from non-agricultural backgrounds into, and educate children about, farming," says Sophie, who won Women in Dairy's 2021 Dairy Woman of the Year award. "Welcoming groups to the farm and visiting schools to talk about food production and career opportunities are regular fixtures in my diary." |



Innovative tech: calves are fed using a mobile 50-point feeder

Responsible Minerals for healthier cows and healthier profits



The Trouw Nutrition Responsible Minerals strategy delivers safe, efficient and environmentally friendly mineral and vitamin packages to maximise performance and profitability and minimise environmental impact.

Minerals are essential nutrients for dairy cows. The requirements for different minerals will be affected by factors such as milk yield, stage of lactation, whether in calf and so on. The nutritional objective is to ensure that the requirements are met to optimise health and performance and subsequently the profitability of your herd.

Both over or under feeding minerals will reduce performance, have a negative effect on cow health and cost you money. Underfeed and cows won't perform to their potential. Overfeeding pushes up costs and in doing so you run the risk of toxicity; this also increases excretion, having a detrimental effect on the environment and performance.

You also need to feed minerals in the most available form to maximise efficiency. Highly bioavailable mineral sources are used more efficiently by the cow, meaning they perform better and you can feed less, helping reduce costs.



Selko IntelliBond hydroxy trace minerals are highly bioavailable and have been developed as a cost-effective alternative to conventional trace mineral sources. Independent university trials have shown that IntelliBond hydroxy forms of copper and zinc are nearly twice as bioavailable as inorganic zinc and copper.

Responsible minerals for better performance

A responsible mineral strategy based on Selko IntelliBond will help ensure your cows perform as well as possible by keeping them healthy and productive. When compared to copper sulphate and other conventional sources of trace mineral Selko IntelliBond yields a significant improvement in ration digestibility. Conventional copper sulphate is excellent at killing microbes, which is why it is used as an antimicrobial in footbath solutions. In the rumen it has a similar effect, very effectively killing off rumen microbes and reducing ration utilisation.

Better digestibility

A trial carried out by the Ohio State University showed that completely replacing sulphates trace minerals with Selko IntelliBond improves fibre digestion (figure 1). Every 1 point increase in ration digestibility yields an extra 0.25-0.3kg of milk per day; this increase helps to improve income over feed costs and lifetime daily yield.

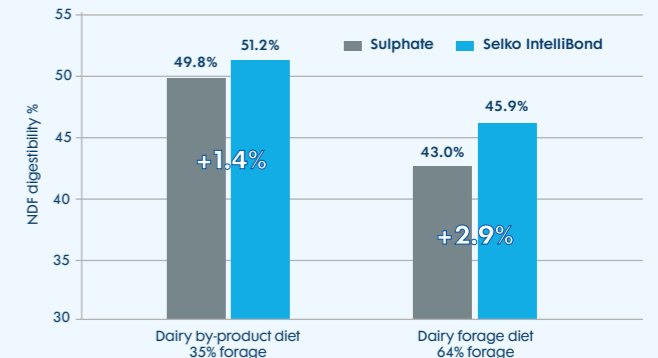


Figure 1: Digestibility of both high and low forage diets is improved with supplementation with Selko IntelliBond.

Improved yields

Research has confirmed the benefits of improved diet digestibility. In the study outlined below cows fed Selko IntelliBond in place of other conventional sources reached peak milk yield sooner and produced 3.5 litres more milk at peak lactation (figure 2).

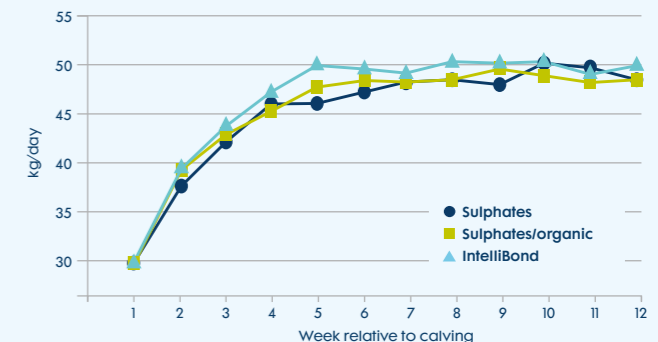


Figure 2: Milk yield of cows supplemented with Selko IntelliBond, sulphates, or a mixture of sulphates and organic trace minerals.

Producing more milk from the same feed input means better income over feed costs. It also means that you are cutting emissions reducing the carbon per kilo of energy corrected milk produced and driving down overall carbon footprint.

A Responsible Minerals strategy based on Selko IntelliBond hydroxy minerals can help unlock the potential of your cows while reducing environmental impact.

If you want to take action please contact us at trouwnutrition.co.uk/intellibond

