

Zero grazing paves the way to reduced feed costs and increased milk from forage

Cash and carry

'Cut and carry', as zero grazing is also called, can help to maximise grass dry matter yields throughout the growing season and reduce waste. Two producers tell us how the system works on their units and why selecting the right grass mixture is key to their success.

text **Rachael Porter**

Escalating protein prices were the catalyst that saw Alec Robertson switch to zero grazing his 520-cow herd, which he manages at Coopon Carse Farm in Wigtownshire, five years ago. And he's not looked back since.

"Our cows are housed all year round and, at that time, we were exploring ways to best utilise the forage that we grow on the farm to maximise efficiency," he says.

It's the unit's high rainfall, cow numbers and heavy clay that lend themselves to zero grazing, according to Alec. "It's not a good combination if you want to graze cows and I believe that 'cut and carry' is a far better way for us to utilise grass at this unit and to maximise our land potential – particularly when the only thing that grows really well here is grass."

Alec has been using Sinclair McGill's Scotsward mixture for silage for many years: "Because it gives us a good cutting window and doesn't head too quickly. It also produces a dense sward, which stands well and lends itself to cutting. And we see strong regrowth too," he says.

All sound ideal attributes for a zero-grazing sward and so Alec and his team gave it a try and it's been working extremely well. "Sometimes we'll cut a field up to seven times during the growing season and we always see good regrowth."

This mixture comprises mid-season and late perennial ryegrasses, as well as a white clover blend and Timothy

grass. "The latter helps the sward to 'stand up' to the mower," says Limagrain UK's Ian Misselbrook. His company supplies Sinclair McGill mixtures to Alec via distributor Lindsay Ker at McGill and Smith Seeds. "It's a medium- to long-term cutting mixture, developed for either zero grazing or silage, but it also offers good grazing qualities and the clover contributes to a good aftermath," he adds.

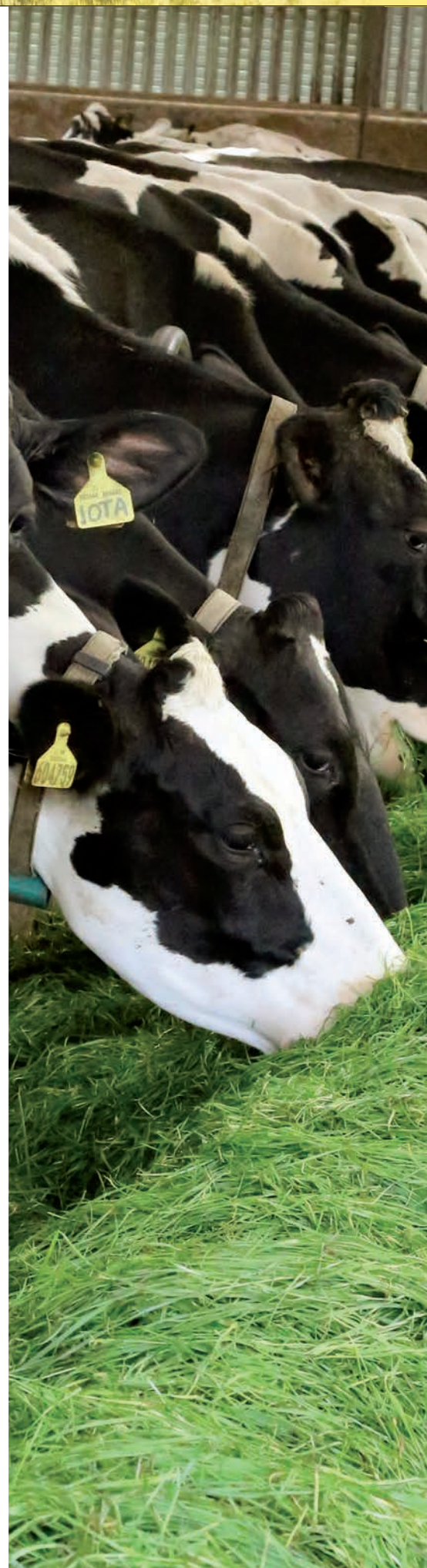
"And it's a mixture that was designed to thrive in the slightly harsher climate of Scotland and Northern Ireland, but producers further south are using it, particularly on zero grazing units."

Cutting season

Alec begins the 'cut and carry' season in mid April and continues through to early October, depending on the weather. He cuts two loads of grass each day, anytime between 10.00am and 11.00am. "This allows the sugar levels in the grass to rise a little."

And he weighs it as he harvests it, using a Lely mower on a Schuitemaker forage harvester, ensuring he doesn't waste grass by taking more than he needs. He mows around 5kg DM per cow per day – that's between 35kg and 37kg fresh weight, depending on how wet conditions are, and it weighs in at upwards of 15 tonnes per day. "If it's been raining I can just tell that I need to cut a bit more."

The herd is currently averaging 10,900 litres at 3.8% butterfat and 3.25% protein. The milk from forage figure is creeping upwards from 4,500 litres, but most notable for Alec is the reduction in





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bought-in protein costs. "Ensuring that the cows have access to fresh grass 180 days of the year has seen our feed bill for concentrate alone fall by around £60,000," he says.

Feed cost savings per litre soon become big numbers when you have a large and high yielding herd. "Our latest figures show that we're saving £1.00 per cow per day – that's 3.3ppl on 30 litres – by feeding fresh grass. And we're also saving on making silage to feed them through the wetter or slower grass-growing periods through the summer." Alec says that it costs him £4.65 to feed cows a tonne of fresh grass, compared to £11.26 to feed than a tonne of silage. "That's more than twice the cost of zero-grazed grass and fresh grass also has a higher ME and more protein than silage. It really is a 'win win'.

Better management

Stuart Davies is another 'cut and carry' producer who waxes lyrical about the benefits of zero grazing. He runs his 130-cow herd, near Cholmondeley in Cheshire, and says that adopting a zero grazing system allows him to manage his 75 hectares of grassland 'better'. "I certainly get more dry matter yield from it throughout the growing season and it's top quality grass too," he says. Cutting typically starts at the end of February, once the grass starts to grow, and can end as late as mid December. "The grass tends to stop growing here in November or December. When it stops, we stop cutting. Until then, we really are making the most of our grass crop potential." And so is his commercial herd, which

he began cross breeding with Norwegian Red around five years ago. "We use Fleckvieh sires as a second cross and back to Holstein for the third cross. I was looking for better fertility and to breed smaller cows – my cow housing and facilities were built for Friesian-type cattle and not Holsteins. I also think that the resulting cows and heifers are better suited to eating the grass," adds Stuart.

Maximising production

The herd calves from the end of March through to the end of October and milk is sold to Tesco through MullerWiseman. "It's a seasonality contract, so we're looking to produce as much milk from grass – the cheapest feed available to us – as possible. And being able to cut and feed grass as late as December really allows us to maximise milk production from forage."

Stuart still makes a considerable amount of silage – around 2,500 tonnes is clamped and he also makes 350 big bales each year. "In the middle of the grazing season, we start to dry cows off. So that's when we go in and make silage rather than feeding the cut grass to the cows." He looks for a dense sward – between 10cm and 15cm in height – before cutting. "It's important to avoid letting the grass become tall and straggly because this is too fibrous. It's the same principle as grazing – I just cut the grass to feed the cows, rather than putting them into the field to harvest it themselves."

Stuart says that he first 'dabbled' in zero grazing 30 years ago. "I wanted to extend the grazing season and make sure that



Stuart Davies: "I wanted to extend the 'grazing' season and reduce waste"

everything we grew we could feed. Advances in grass varieties selection and grass seed mixtures means that we can grow leys that don't want to rush to head, just as some modern Italian ryegrass want to do from late May onwards."

Stuart uses Limagrain UK's Monarch Multigraze plus clover, which he cuts every four to six weeks.

"I'm just grazing it with a mower, rather than cows," he says. Working with his agronomist and Spunhill Farm Sales' agronomist Mark Hancock, he's looking at reseeding some grassland later this year using a mixture comprising two late-

heading tetraploids and two late-heading diploids, which Limagrain UK will supply.

"Stuart complained in the past that some modern grasses headed too early and had too much yield. He made the mistake of reducing fertiliser applications and this actually stressed the grass and caused it to head early – the opposite of what he was trying to achieve," says Mark.

"So I learnt quickly that it's important to reduce all possible causes of stress to the grass and opted to sow a late heading mixture," says Stuart.

Grass is 'harvested', twice a day, using an Italian-made Bonino zero grazing

wagon, which cuts and picks up the crop with a mower attachment that has two drums and a moving floor.

The same piece of kit then travels back to the unit and down the feed passage and pushes the grass out, in a long sausage shape, behind the machine. The grass is left in front of the milking herd for 12 hours and then any remaining is swept up and fed to the dry cows. "There's little, if any, waste," says Stuart.

Tight rotation

He says that he works hard between February and September to keep the sward and the cutting rotation 'tight' to maximise both grass productivity and utilisation. "And we have to make sure that any paddocks that cows have grazed are cow-free for at least a month before we zero graze them again.

"Cows can detect that cows have been on the sward and will reject the grass if we cut it any sooner – it's the same if we've injected slurry. So we have to be very organised and plan our grass growing, cutting and grazing season extremely well."

Herd average yield is 9,800 litres, with 4,150 litres from forage. "I'm certain that it wouldn't be that high if we didn't zero graze," says Stuart, who adds that after December, when he switches to feeding grass silage and concentrate, milk yield always drops slightly. "They definitely do better on fresh grass." |

