

Measure, manage and monitor is key to grazing success

Reduce grass 'stress' and boost crop performance

Stressed grass means poor grazing performance – something that producers can ill afford as they look to maximise its performance, particularly under the current economic pressures. So what can producers do to minimise pressure on their grass crop and ensure that it flourishes.

text **Rachael Porter**

Treat grass as a crop is not a new mantra, yet it's one that many producers could still benefit from adopting. Guessing when it comes to, among other things, fertiliser applications and assessing rather than measuring how grazing is performing, can prove costly. Potential production may not be realised, and grass and silage quality may be at risk. And money can be wasted through excessive fertiliser and bought-in feed costs. So says Limagrain UK's Ian Misselbrook, who is urging producers to go back to basics. "Start with the soil," he says. "Many

producers still fail to test their soil for nutrient balance and pH – either at all or regularly enough," he says adding that, in a bid to cut costs, some producers have reduced fertiliser and lime use with a detrimental effect. "Others are applying more than they need to, or it's simply unavailable to the plant because pH is too low. If you don't know what your starting point is then it's impossible to ensure that you're applying fertiliser and lime in the quantities that will facilitate efficient and healthy grass growth."

Too much or, more typically seen on UK dairy units, not enough fertiliser and low soil pH will 'stress' the grass crop and



Father-and-son team: David and James Lee work together to maximise forage efficiency

this is highlighted by NRM soil analyses (see Figure 1).

Disease, particularly after such a mild and wet winter, could also be a key stressor for grass this spring, so selecting varieties and mixtures that offer better resistance to fungal growth can also help ensure a healthy crop, as can dealing with any drainage and compaction issues.

Dry weather

Conversely, drought conditions and a shortfall in nitrogen can stress grass and cause it to head early. This is a problem seen on many farms, according to Limagrain UK's seed specialist Brian Copestake.

Early bite: grazing is ready for cows to be turned out, once they've calved, from February onwards



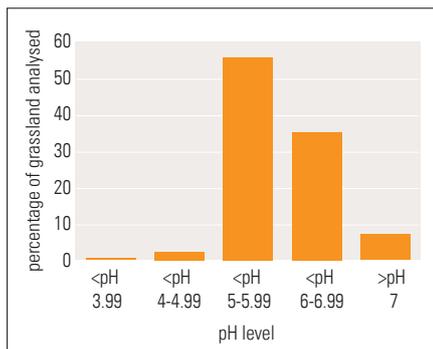


Figure 1: Grassland pH levels in UK (source: NRM)

Indeed, some producers believe that ‘modern’ grasses ‘head’ too early and offer too much yield. He cites a producer who reduced his fertiliser applications due to this belief: “The result was that the grass was stressed and so it headed too early – the opposite of what he was trying to achieve.

“In this situation, producers should ensure that they sow a late heading mixture – deep rooting tetraploids can help here and are preferably to more old fashioned diploids.”

And he reminds producers that their agronomist can play a key role in getting this balance right. “There’s no short cut to good grassland management and it’s important to invest in the crop – and soil management – to realise its potential.”

‘Crop’ approach

One producer who recognises just how vital it is to treat his grassland as a crop is David Lee, who runs a 400-cow herd in partnership with his wife Rachel and son James on the Welsh Borders.

He has a total of 183 hectares of grassland – for grazing and silage – both owned on his unit and rented on a neighbouring farm. The grassland surrounding his unit is mainly permanent pasture for grazing, which supports his block-calved herd from spring through to early autumn.

“We’re very reliant on grass for our seasonal production pattern,” he says, adding that cows are turned out, once they’ve calved, from February through to April and until the end of October.

“And because of that our grass and our grazing and grassland management have to be tip top. We certainly treat it as a crop and we soil test for nutrients and pH every three years – so we test one third of our grassland each year. I like to see a soil at pH 6 – that’s where I think it’s at its most productive and there are no issues with nutrients being locked up or unavailable.”



Measure and monitor: a plate meter is used to check on grass growth at least once a week

Since grass is the cheapest feed available to David, his goal is to get as much into his cows as possible. He does this by rotationally grazing, using paddocks with a system of cow tracks. “And there’s very little waste – we’re on top of grass growth from the very start of the season and keep the rotation tight. James goes out at least once a week with a plate meter to measure the grass cover. How else can we be sure of how well the grass leys are performing and how much fertiliser we need to apply, and in what ratios?”

Grass test

Grass is also tested throughout the season – typically every two weeks – to ensure that quality is maintained. David and James are looking for an ME of at least 12MJ/kg DM and around 20% protein. “And we note down grass cover and put all the data into Agrinet. Using this on-line software also helps us to monitor what’s going on,” says David.

“Managing grass as a crop, and ensuring that it’s not stressed and that it’s performing to its potential, is also about checking output – just as you’d weigh grain yield and dry matter when harvesting a cereal crop. It completes the picture for us,” he adds. “We need to know what’s going on – what’s the ‘real’ grass yield. This is a crucial stepping stone in maximising milk from forage and, as I say, turning green to gold.”

Grass varieties are important too, even though much of his grazing platform is permanent pasture. He has carried out some reseeding during the past few years, but only where grass yields dipped below 15t DM/ha.

Monitoring performance

“I have some 30 year-old leys that are still producing 14t DM/ha – I know this because we’re measuring, monitoring and managing.

And I think it’s the attention to detail – looking at what goes into the grass and what comes off the leys – and managing grass as a crop that not only extends the lifespan of our leys but also ensures that they’re extremely productive.”

He recently carried out some reseeding – some 10.5ha – using a Sinclair McGill seed mixture containing Matrix and he was pleased with the results. “We saw a consistent and impressive grass yield – 16t DM/ha in the first year – made all the more impressive because weather conditions were poor when it was sown and it did look a little ‘gappy’. I can’t wait to see what it’ll yield this year, now it’s established.”

He chose this mixture because it suits his system – offering extended grazing on both ‘shoulders’ of the grazing season. “It gets off to an early start in the spring and lasts well into the autumn and I’d certainly use it again if I need to carry out more reseeding in the future.” |