

Extended grazing and top yields

Growing crops fills summer grazing shortages and ensures continued high yields

We visit a Dumfries-based producer who proves that excellent grassland management, as well as a diverse mix of forage cropping, really can support a high yielding herd. He runs his herd on an extensive system and achieves 'intensive' yields.

Robert Kirkwood decided to switch to a forage-based production system six years ago to boost the viability of his business, and he assumed that he would need more cows to achieve the same total milk output.

But, in fact, despite significantly longer grazing seasons and a dramatically reduced bought-in feed bill, the Mouswald Grange herd average remains at an impressive 9,000 litres – busting the myth that extensification must mean sacrificing yields.

Success has been achieved through the excellent management of high quality grass and clover grazing leys backed up by a range of other fodder crops including brassicas and perennial chicory. Red clover is also now a key ingredient – in grazing and cutting leys – helping to cut both fertiliser and bought-in protein feed costs quite markedly as the system has become established.

Full potential

The overriding philosophy at the 260ha unit, based at Mouswald near Dumfries, is to minimise the number of days that cows are housed. To this end the grazing season for the all-year-round calving 200-cow herd has been extended from six months to nearer nine months. Cows are turned out in February, if possible, with the understanding being that pasture needs to be grazed in order to grow to its full potential.

A rotational paddock system is serviced by an excellent network of tracks and high quality Aber perennial ryegrass and white clover leys ensure sustained season-long production. Far from being



Robert Kirkwood: "We're seeing more milk production from our grass"

a dry part of the country, average rainfall for the farm is more than 1,000mm annually, but this is not a problem thanks to the excellent management and mix of cropping.

"I believe we are seeing an extra two litres per cow per day from the use of the best IGER-bred Aber ryegrass varieties," says Robert Kirkwood. "The inclusion of both white and red clover is also an important factor, both in terms of reducing our need for bagged nitrogen and also to maintain the consistency of grazing quality."

Cows are introduced to fresh grazing after every milking and Robert always has back-up pastures available to ensure a constant supply of quality fodder.

And protection against dry periods is now provided through the introduction of Puna II perennial chicory into the grazing swards. The deep tap root of this highly palatable herbaceous plant makes it more drought-tolerant than grass –



Extensification success: more grazing – of grass and other crops – has maintained milk yields at Mouswald Grange

and even clover – and also ensures a good supply of nutrients from deeper down in the soil profile. And improved access to minerals resulting from the inclusion of perennial chicory in grazing swards could have an impact on fertility and other factors.

Other potential grazing gaps are avoided by growing fodder beet, kale and the fast growing kale/rape hybrid Swift. These brassica crops work well in a six-year rotation that includes a regular reseeding programme.

Fodder beet

"We don't buffer feed the cows as this only detracts from their grazing intake,"

says Robert. "However, we have found that grazing crops, like fodder beet and Swift, for an hour or so after morning milking helps to keep the milk going and also lifts the milk proteins. We keep our dry cows very cost effectively by strip grazing them on Maris Kestrel kale by day."

Much of Robert's philosophy is based on ideas gleaned from IGER. Incorporation of red clover into specialist cutting leys, alongside high sugar hybrid ryegrasses such as AberEcho, means that the farm's grazing achieves the optimum balance of good early growth and fixed nitrogen, which is available earlier in the season from the red clover than it is from white

clover. Very little artificial fertiliser is now used on the silage ground and, in time, it is possible that Robert will rely totally on slurry and red clover for his nitrogen supply.

"We now have red clover sown across about a quarter of the farm," says Robert, "and I estimate that this is saving us about 30 tonnes in bagged nitrogen and 40 tonnes in soya every year. Increased use of clover has helped halve our bagged fertiliser use so far." And there are plenty of other benefits. The herd is fitter, just as fertile as it was prior to the system switch and the cows certainly have better feet since the move to a forage-based system. With the cost

of keeping cows inside estimated to be around £1.50 per cow per day – and yields from the extended grazing system as high as ever – it's hardly surprising that Robert says he's never looked back.

Rachael Porter

Farm walk

Robert is hosting a BGS/MDC/RABDF 'Milking Grass for Profit' farm walk on Wednesday April 2. The free event starts at 10.30am. Register by telephoning RABDF on 0845 4582711 or e-mail lauradickinson@rabdf.co.uk.