

Forage crop proves invaluable for an expanding dairy business

# Maize 'debut' is a success

Growing more maize has helped drive the performance of one Leicestershire-based herd and it is set to continue to play an increasing role as the herd expands to 600 cows and moves into a new unit on the farm.

text **Phil Eades**

**G**rowing any crop for the first time on a new unit is always a little nerve racking but, with hindsight, Nick Sercombe needn't have worried about making his maize crop debut at Knaptoft Hall Farm. Working closely with Nickerson's Simon Broddle, he grew 14.5 hectares of forage maize at the farm, based near Market Harborough, in 2014 and it was a resounding success.

He took over as manager at this 445-hectare grass-and-cereal unit in November 2013, which was already home to 240 cows. The unit has never grown maize before.

Nick also brought his own herd of cows with him, from a previous

farming agreement, and his immediate objectives were to improve cow performance and to manage the move to a new purpose-built 600-cow unit on the farm during 2015.

Back then the herd was averaging 7,700 litres of milk, but by late 2014 this had already increased to 9,000 litres, putting around £500 on his margin over purchased feed in the process.

## Increased area

"There was no single thing that made the difference," Nick explains. "We improved cow comfort by ripping out the cubicles, which were too small for the cows, and increased the number of cow groups. We also tackled lameness



Nick Sercombe (left) and Simon Broddle

issues with regular foot trimming. And we adjusted the diet."

The cows had been fed grass silage top dressed with a blend. Concentrates were fed, to yield, through the parlour. But Nick was keen to feed mixed forages and bought in some maize silage to improve the overall ration.

"Increasing yield from forage is an important part of our plan," he says. "I am a great fan of maize silage, having fed it at my previous unit. By the time we move into the 600-cow unit I want to be able to feed it all year round.

"To do this I will eventually need to be growing around 65 hectares. I'll increase the area gradually. This is a farm where maize has never been grown before."

*Bagged solution: maize silage space was limited due to higher wholecrop yields*



The farm comprises mainly heavy soils and, as maize was going to follow grass, it could have been a challenge. But in the end the crop yielded 650 tonnes of forage, averaging 45t/hectare, although admittedly it was a good maize growing year.

“The biggest problem with drilling maize after grass is wireworm, particularly if the grass has been down for a while,” explains agronomist Simon.

### Seed treatment

“Wireworm can reduce yields by up to 60%, so it was essential to drill with treated seed. The cost of seed treatment is around £50 per hectare, but this is insignificant compared to the risk.”

They grew the LG variety Yukon, which combines good agronomic features with the ability to produce top quality forage. It is an early variety with good early vigour and excellent standing power, which Simon felt would suit the farm.

“Plant numbers are the key to yield and with heavier land we had to wait for the soil to warm up and work down to a good seed bed,” he explains. The crop was drilled in mid-April. The fields were heavily mucked before drilling and the crop received 240kg N/ha. Weed control was via a standard herbicide pre- and post-emergence programme.

The maize was harvested on September 30 and the crop came off in good condition. The plan had been to clamp it

on top of wholecrop, but because more wholecrop had been made than expected there was no space. So the maize has been stored in AgBags. It has analysed well and Nick is pleased with his first-ever crop of maize silage.

### Summer buffer

“This winter we are still using bought-in silage, saving the 2014 crop for buffer feeding in the summer and for early autumn calvers at the new unit,” says Nick. “This will give time for the starch degradability to increase. Having the crop in AgBags also means we will be working with a narrow face during the summer, which will help reduce spoilage.”

The forage portion of the diet currently comprises 50% grass silage, 25% maize and 25% wholecrop and Nick is targeting a three-forage system moving forward. He expects the maize proportion to increase over time as he strives for a more consistent diet. Fresh calved cows will also get first-cut grass all year round. This year Simon and Nick expect to grow two varieties to suit the farm’s different soils and maximise the production of quality forage.

“We will be looking for high quality forage varieties,” Simon explains. “Because 50% of the harvested crop is the leaf and stem and stover we want varieties with good cell wall digestibility, as well as excellent starch content.

Ideally we want to produce a 30% dry matter and 30% starch forage.

“On the heavier land we will look at varieties like LG Sunlite, which has the phenomenal early vigour that we need. It also has excellent cell wall digestibility, which will help to ensure the high energy yield per hectare that’s vital for Nick’s system.

“On the lighter ground we will consider a variety such as LG Asgaard, which is well suited to that type of soil and is slightly later maturing. To ensure the crops are ready at the same time we will probably fine tune seed rates to increase maturity and allow the whole planned 65 hectares to be harvested as one block,” he explains.

### Low-stress system

Nick says that a consistent diet, based on quality silage, will help ease the herd’s transition to the new set up. “Our aim will be a low-stress system and we will not chase high yields. I will be happy with 9,000 litre averages, with good milk quality, to exploit our contract.

“If the cows milk better in a given year because we have better quality forage that will be a bonus, but I won’t be increasing concentrates in leaner forage years just to maintain yields.

“We know that maize silage can give us a consistent quality feed all year round and this will help underpin performance.” |

*Early harvest: forage maize was cut, chopped and ensiled on September 30*

