



Clamp management: face width has been reduced to 10 metres

Variety selection is crucial to maize crop – and winter feeding – success

Pointers for maize success

Switching from all-year-round calving to an autumn-block system has been made easier by growing and feeding more maize silage, according to one Cornwall-based producer. He told us more about how he manages his increased crop.

text **Phil Eades**

A greater dependence on maize silage means that close attention to variety choice is even more important to produce sufficient and high quality forage for producer Kevin Bloomfield.

He runs the 89-hectare Choon Farm, on the Lizard Peninsula in Cornwall, and has grown maize for several years. But now the crop is taking on a greater significance since he switched to block calving his 130-cow herd.

The move from all-year-round calving was designed to simplify the overall system and to improve the use of grazing, as well as increase milk from forage. The farm is prone to drying out and grass can be in short supply in the late summer.

“By calving from August onwards we

can bring cows straight onto winter rations and move them out to grass in the spring when they are safely in calf,” Kevin explains. “They will be drying off as grass runs short.

“Our aim is to feed a consistent diet at peak lactation and while cows are being served because this is easier than having to manage variable quality grazing, as was often the case when we calved all year round.”

Winter ration

A TMR, comprising maize and grass silage, fodder beet, barley and a 40% protein blend, is fed in winter. In previous years maize was not available when the cows were housed, so the diet would initially contain higher proportions of grass and fodder beet. The aim now is to increase

maize production to allow feeding all year round.

In 2015 Kevin grew 13 hectares of maize, an increase on 2014’s cropping area, and in 2016 he plans to grow around 16 hectares.

“This year we harvested 600 tonnes of maize silage and this means that we will have some for buffer feeding, as well as silage available to feed to fresh calvers in August and September, before we can add the 2016 crop to rations.

“Because we are growing a greater proportion of maize, we must be sure to maximise the tonnage of quality feed available and that it can be harvested in time. This makes variety choice a crucial management decision.”

Kevin adds that it is also important to get maize planted early, so he is looking for good early vigour. He also needs an early maturing variety to ensure that the crop dries down quickly. He says that, being close to the coast in Cornwall, he sees very little ‘drying down’ of maize after mid-October.

“We won’t consider anything later than maturity class 10, but we also want a variety that will deliver good yields of high quality silage with a high energy

Kevin Bloomfield (left) and Alan Moore: “Variety selection is key to success”



dry matter (%)	28.5
D value (%)	73.3
ME (MJ/kg DM)	11.6
starch (%)	31.4
starch degradability (%)	74.7
intake potential (G/kg ML)	102.4

Table 1: Choon Farm LG Glory analysis 2015

content and good starch levels. We used to grow three or four different varieties at the same time, but I think that the fields being used have far more influence on how the crop will perform and from now on we will grow a single variety each year.”

Top-ranked variety

Variety selection is discussed with ACT’s Alan Moore and he explains that, after trialling the variety in 2014, Kevin now grows an LG variety called Glory exclusively.

“Two years ago a proportion of the crop we grew was Glory, as it meets all our criteria. It offers maturity class 10 and scores 7.5 for early vigour, combined with high starch content and excellent fibre digestibility,” says Alan. “It is the top-ranked variety for starch yield and produces high dry matter yields. And it’s fourth highest on the BSPB/NIAB List for ME yield.”

The variety was drilled on May 15, which is typical for the farm, and harvested on October 11 before being added to the herd’s TMR from early November.

“The crop looked good for the year and was all ready to cut. The plant was a little green, but the cobs were a good size and had ripened evenly,” he says, adding that, most importantly, it analysed well (see Table 1).

Kevin focuses on making the best quality forage and minimising waste. The maize clamp has concrete side walls and the forage is covered with an oxygen barrier and plastic sheeting.

To reduce aerobic spoilage the crop is treated with Ecocorn. “I don’t think you need an additive to encourage more rapid maize fermentation but we want to keep the face cool, particularly in the summer. There is no point investing in feed and then wasting it. We have also reduced the face width to 10 metres to help reduce spoilage,” he adds.

“By focusing on variety selection we can ensure that we produce a high quality feed to act as the foundation of our feeding system and not only right through the year but also, particularly, in the crucial early lactation period.” |

More-ish maize: increased hectareage allows Kevin to feed this forage to his herd all year round

