LIVESTOCK MAIZE



A change from breeding cattle to buying-in large numbers of suckled calves has increased the feed requirement on a Monmouthshire farm, with a maize silage inclusion of up to 70 per cent to help fulfil forage demand. **Wendy Short** reports.

How maize provides a boost to weight gain

uring peak times there may be up to 550-head of cattle at Ben Attewell's Chapel Farm, near Magor.

Their diet is carefully managed at all stages and achieves an annual figure of 98 per cent of finished animals meeting the top two E and U grades, with a small number of females joining other herds as bulling heifers.

Ben, who farms with his father, Len, travels thousands of miles each year to find the stamp of calf he requires.

His busiest time is during the autumn suckled calf sales, when he will buy up to 120 calves at each market.

"I cover an area as far south as Dorset and Wiltshire, throughout Wales and as far north as Northumberland, in my search to find continental calves with the right frame and the genetic ability to finish efficiently," he says.

"I usually look for spring-born steers and heifers to take through the winter and then spend the summer at grass in batches of 40-50

"They will have a short, intensive finishing period at housing in their second winter."

Calves are normally transported to Chapel Farm by a specialist courier service which has stringent biosecurity protocols and experienced drivers.



They enter the straw-bedded buildings weighing about 320kg at seven months old and are kept in groups of 30-90 head.

The cattle will be taken to 700plus kg, with an average deadweight figure of just above 400kg.

The larger abattoirs are the farm's main customers, although



Feed balance is crucial.

some are sold to independent butchers.

Acutely aware of disease risk when buying in calves, Mr Attewell has a strong preference for sourcing from health-monitored herds, with an increasing number of purchases presented pre-vaccinated.

His previous suckler herd experience has led to a keen interest in genetics and he will often feed back information to his suppliers.

"Breeding always shows and I had one tremendous calf which finished at least six weeks earlier than the rest of the batch.

"When I gave its tag number to the producer, I learned that it was

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Ben and Len Attewell have up to 550-head at peak times.

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LIVESTOCK MAIZE

out of the best cow on the farm and that she had bred two very good stock bulls.

"At the other end of the scale was a less impressive calf - it turned out to have been sired by a small bull that was used on heifers."

Situated at sea-level and with a mixture of heavy and light soils, the farm has some fields that are ideal for growing maize and the 36-hectare (90-acre) block that is made into silage is considered fundamental to the system.

Ben says: "Achieving the required weight gain in the latter stages is relatively straightforward if high levels of concentrates are being offered, but in my opinion, maize silage is the only option when it comes to boosting weight gain with home-grown forages.

"It is safe to use at high inclusion rates as it degrades at a steady rate in the rumen, as well as being highly palatable."

Pre-crimped maize grain, that is purchased from another farm, supplies additional high quality, rumen-degradable starch.

Target

It is mixed with grass silage, maize silage, brewers' grains, minerals and molasses in varying quantities, depending on the age bracket.

Maize silage is also fed to the farm's ewes post-lambing, with purchased concentrate feed used sparingly.

"The target liveweight gain for the growing cattle is 1.34kg/head/ day," he explains.

"If they are pushed harder they will tend to lay down fat. At turnout time in June, the total mixed ration will be buffer-fed to maintain a rising plane of nutrition.

"A modest quantity of concentrate feed is offered in the latter stages of finishing, together with maize silage which makes up about 70 per cent of the total mixed ration.

"Concentrates are also sprinkled on the total mixed ration once a day for the first two months after



Farm facts

- The family also runs a mixed flock of sheep which produces salt marsh lamb and mutton for local butchers and abattoirs
- The sheep are Suffolk cross Scotch Half-breds, put to a Texel tup
- For the main grazing and silage land Ben designs his own seed

mixture, which contains clover, as well as diploid perennial ryegrasses with a high sugar content and good ground-covering characteristics

■ The seed mixture helps to extend the grazing shoulders and turnout is usually late April until November

the calves' arrival - it is a quick method of checking the groups at the stage when disease risk is at its highest."

The maize is usually sown in late April, with a predicted harvest date of the first week in September.

Like many farms across the country, last year's results were mixed.

"The crop looked outstanding in the field and the cobs filled well, but the volume of maize did not match the previous year's production; this was probably due to lack of rainfall. "However the silage starch content was excellent this season at 37 per cent-plus, whereas I would normally expect 32-33 per cent.

"The increase in quality will allow for a greater saving on concentrate input costs, so I am certainly not complaining."

For 2022, one of the two varieties sown was KWS Exelon, which has the genetic potential to carry 20 grain rings instead of the 15-16 rings typical for an older hybrid.

The early/maincrop variety has a lower ear insertion height, to offset the extra cob weight.

Maturity

The other variety sown was the ultra-early Augustus KWS, earmarked for some rented land which was not available until towards the end of the sowing period.

It was chosen because it requires fewer days to reach maturity, compared with maincrop varieties, and helped to keep harvest dates on

Maize is currently grown on dedicated areas, but the farm is moving to a grass; maize; cereals and back to grass rotation, to broaden the range of herbicide programme options.



Concentrates are also sprinkled on the TMR once a day for the first two months after the calves' arrival

BEN ATTEWELL

Some of the farm land covers a salt marsh containing samphire.

"The salt marsh is a protected area and therefore it does not receive fertiliser, but the heifers do very well on it and at certain times of the year they will be grazing on samphire," says Ben.

The unit has changed significantly since 2015, when the business carried a 110-strong suckler herd with pedigree Limousin bulls as sires, as well as having its own small pedigree Limousin herd under the 'Capel' prefix.

The current enterprise requires 'a steady nerve', due to the sizeable outlay required for autumn calf purchases, points out Ben, who is the third generation on the holding.

"The business has a lot of money invested in cattle, so my first goal when the winter selling period begins is to replace the money I spent on calves the previous autumn and make sure the bills are paid up to date.

"Cashflow has to be kept under tight control, but overall I think that our niche enterprise in finishing high quality beef animals on a forage-based system is right for the farm."



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