

# MGA TIMES

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*Simon Draper*

## MAIZE UPDATE

### Get ready for the off!

Although early drilling extends the growing season and can have a positive effect on the quantity and quality of the harvested crop, it needs to be very carefully considered. Drilling into cold, wet soil can result in a patchy, uneven crop due to either blocked coulters during drilling or seed rotting prior to germination.

Late frosts following drilling can also have very serious implications for young maize plants and therefore careful monitoring of soil conditions is vital if you want to drill early. Also beware of excessive soil damage caused by early cultivation and drilling. The following points may be useful: -

- Choose tractor tyres to minimise compaction. Top-soil compaction is related to ground pressure, and can be minimised by fitting larger tyres that run at reduced inflation pressures. However, sub-soil compaction is more difficult to prevent as it is largely influenced by the overall weight on the tyre, rather than tyre size or inflation (SAC Technical Note T469). Try to minimise the overall weight of the tractor and cultivating/drilling machinery. Plan well ahead to minimise the number of passes required.
- Consider using an 'easy access' fence, i.e. a wire fence that allows for multiple access points. These can be very beneficial for the regular movement of machinery and/or livestock in & out of fields.

## MAIZE CONFERENCE

### Find out 'Which Forage for Profit?' at the MGA Annual Conference, incorporating a visit to Kemble farms

Applications are coming in fast for the MGA's forthcoming Annual Conference, which takes place at the Royal Agricultural College on Wednesday 26<sup>th</sup> February.

As detailed in the previous mailing, the conference promises to provide 'something for everyone' with a fresh approach providing a full and varied morning programme dealing with technical and practical aspects of maize and complimentary forages and incorporating an afternoon farm walk to promote practical discussion.

The farm walk and discussion at Kemble Farms will no doubt be of great interest and benefit to members. Kemble is a mixed arable and dairy farm comprising 1400 hectares, 400 of which are on a contract farming arrangement. The 550 head dairy herd currently produces 5 million litres of milk from a diet based primarily on maize but including grass and wholecrop pea silage. Home produced crimped wheat is also included in the ration.

Dirk Zaaier MRCVS (from The Netherlands) and Pete Kelly (nutritionist), both of whom are presenting papers during the morning session of the Conference, will also be present for discussion on the farm, together with Ray Williams MRCVS (Kemble Farms Vet.) and David Ball (Kemble Farms Manager).

If you would like to attend the Conference and haven't yet booked, please complete the enclosed booking form and send to the MGA Office as soon as possible to avoid disappointment. It is also possible to book by credit card over the telephone - if you would prefer to book via this method please contact Noelle at the office (01189 761276).

A pre-conference dinner has been arranged at the Royal Agricultural College on the preceding evening (Tuesday 25<sup>th</sup> February). Members are welcome to join the MGA's Council and some of the speakers for dinner. Full details are given in the enclosed flyer and places, which are limited, will be reserved on a first come, first served basis. Recommended local accommodation lists will be provided on request.

## WHOLECROP FEEDBACK

### Wholecrop farm walk & Conference feedback

Over 50 people attended the pre-conference farm walk held at Andrew Shakeshaft's Whattall Farm in Shropshire earlier this month to view the impressive 500 acre unit and find out more about the farming system. Thanks to

Andrew for hosting this visit.

The following day 90 delegates attended the MGA Wholecrop Conference, which took place at Harper Adams University College, to hear a variety of papers covering: -

- UK dairy farming in the global market  
*Steve Ellwood, HSBC*
- Feed Into Milk  
*Jonathan Blake, Consultant*

## Wholecrop Conference papers continued....

- Exploitation of the value of farm generated nutrients in wholecrop production  
*Mike Slater, Terra Nitrogen*
- The use of wholecrop forages in a farming system  
*Andrew Shakeshaft*
- Experience from a high yielding herd utilising fermented and high dry matter wholecrop and maize.  
*Wil Armitage, Lyons Herd*
- Results from the current MDC dairy and beef trials at Harper Adams with fermented and 'alkalage' wholecrop.

Feedback received indicates that delegates benefited both from the farm walk and the Conference and we were very pleased with both events. If you were unable to attend the Conference and would like to receive a copy of the papers, these are available to members on request from the office. There is also another opportunity to hear Andrew speak at the Annual Conference on 26<sup>th</sup> February.

### FARMER FOCUS

## Farmer Focus: Where wholecrop comes first

Speaking of Wholecrop, MGA member Chris Holt is an excellent example of a farmer using wholecrop cereals to good advantage. Chris farms 2000 acres at Stoke Bardolph Estate in Nottinghamshire for Seven Trent Water. The herd comprises 365 Friesian dairy cows with an average yield of 7400 litres.

The cows are housed all year with paddock exercise and with low concentrate usage an important feature of the system, getting sufficient quantities of high quality forage for year-round feeding is crucial. The main herd are fed a base ration of 6kg/day concentrates, 40kg/day maize silage, 10kg/day wholecrop silage and 1kg/day straw, which

on a dry matter basis equates to approximately 23% concentrates, 53% maize silage, 20% wholecrop wheat and 4% straw. All concentrates are home mixed, consisting of a blend of soya, rape and molasses.

According to Chris, wholecrop wheat makes a very valuable contribution to his dairy system. The cereals - rape - maize rotation used on the farm is very successful, with the wheat harvest in June/July allowing for approximately 4 weeks of sludge disposal before the oil seed rape is drilled.

The high quality and energy dense silage that Chris produces from this wholecrop wheat makes efficient use of the limited storage facilities available on the farm, as clamps becoming empty in the summer can be quickly re-filled and this spreads the labour requirement on the farm.

Wholecrop wheat also makes a useful contribution to the fibre content of the diet and Chris has found the diet seems to be extremely palatable.

Most importantly however are the low costs of production, being £7 and £10 per tonne for wholecrop and maize respectively. This includes contractors charges but excludes fertiliser. With unlimited quantities of free sewage sludge, fertiliser costs are very low on the farm!

*For more information on wholecrop cereals, as mentioned previously, members can request a copy of the Wholecrop Conference proceedings.*

### GEM / CRIMPED MAIZE

## Is your maize crop being used to maximum efficiency?

Consider your options - The benefits of maize silage are now well documented, but could a proportion of your crop be put to better use? More and more farmers are considering the option of producing feeds such as ground ear maize (GEM) or crimped maize grain to broaden the scope and flexibility of

feeding regimes. Although initially daunting, in fact it can be quite simple and cost-effective to produce these high-quality (and fully traceable) feeds on-farm.

Crop management over the growing season is the same as a crop for conventional silage production. Maize grain intended for GEM or crimping is usually harvested about 2 weeks later than a crop for conventional silage. The grains should have reached full dough ripeness by harvest, be a rich yellow gold colour and dent on firm pressure from your thumbnail.

The difference between these two feeds is the possessing required at harvest. GEM is harvested using a snapper header on the forage harvester. This separates the cobs from the stover and processes them through the forage harvester before ensiling. Maize to be used for crimped grain is harvested using a modified header on the combine harvester. The harvester then strips the grain off the central rachis of the cob. This grain is then further processed through a separate crimping machine, which crushes it to expose the starch. The operation is not unlike rolling, with the grain being fed through serrated and differentially speeded rollers. An additive can be applied during the crimping process to help ensure successful storage.

Crimping is usually carried out close to the clamp by a tractor-powered unit. Good ensiling techniques are essential and experienced producers often cannot over-emphasise the importance of good compaction.

Crimping machines are now becoming more widespread and readily available for contracting. At present I have been unable to source information giving a cost comparison of these two crops, but hope to source this information for MGA members in the near future. What is certain is that the use of either will greatly enhance the flexibility of your rations to match the nutritional requirement of dairy and beef cattle.

*Sarah Harrison*