MORLEY

**AGRICULTURAL FOUNDATION** 

www.tmaf.co.uk

Welcome to the Summer 2013 edition of Morley News featuring some of the latest research, work



'Say cheese!' The tractor is a favourite with younger children

and news from The Morley Agricultural Foundation (TMAF).

As a charity we help fund practical agricultural research and development. We also talk to children and students about food and farming and support teachers in schools and colleges.

We are dedicated to becoming a centre that showcases the very best of British farming practices and ideas which is open to all. TMAF owns and farms the land and buildings around Morley in Norfolk with all profits funding further research and education projects.

Please take some time to read through our newsletter and find out more about our activities.

Nick Steed

TMAF Chairman

# TMAF has EARS looking at the bees

TMAF trustee Christine Hill explains how TMAF is investing in research into one of agriculture's most important contributors – the bee.

Bees are thought to be worth up to £200 million per annum to UK agriculture because of their role in crop pollination. But with recent population crashes these mighty insects have rarely been out of the news as scientists and bee-keepers search for causes and solutions.

The Varroa mite is one of the most challenging problems. TMAF supports an Eastern Associations Research Studentship (EARS) and BBSRC-funded PhD looking at bee recognition systems and how they are exploited by the Varroa mite.

EARS 1, begun in 2009 by Ricarda Kather at Sheffield University, has shown that the mite is able to mimic bee recognition signals very quickly, and will change these signals within two to three hours of moving host or hive. The mite rapidly soaks up the host odour like a sponge, changing odour without the effort of making it itself. They can do this from the day they emerge from the egg, which is laid in a brood cell in the hive.

Ricarda's research results will contribute to world-wide honey bee research and is another piece of the jigsaw which needs to be constructed to conquer Varroa.

EARS 1 includes funding for Professor Keith Delaplane, a world leader in bee research from Georgia University, who will be in the UK this summer to continue breeding research to promote colony health and fitness.

TMAF plans to continue to support work on Varroa; the next EARS PhD, EARS 2, is expected to start at Aberdeen University in 2014.

#### Varroa mite

Bees are social insects, communicating through behaviour and particular odours produced in minute quantities by their outer cuticle. Varroa has a very short 10-day reproductive cycle and is parasitic on the bee. It feeds through the bee's cuticle, suppressing the bee's immune system and leading to further infection. The life span of the bee is shortened and colony collapse can occur, usually in winter, when disorientated bees may disperse to other hives and die.

The ability of the Varroa mite to infest a hive and go completely undetected is the basis of current research. If the mite can be detected, and rejected, by the bees then the Varroa problem will be better controlled than by the current methods.

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#### Improve your communication skills

The John Forrest Memorial Award, supported by TMAF and The Felix Cobbold Trust, provides free communication skills training to eight young agriculturalists each year, including dealing with the press, interview techniques, photography, social media and film-making. We are looking for candidates for the three-day course in early January 2014, which takes place at NIAB in Cambridge. Contact David Pask (david.pask@tmaf.co.uk or 01953 859630) for further information.

## **Predicting the 2013 harvest**

The weather has been a greater challenge than usual for farmers in the past few years with extreme climatic events affecting every point of the farm calendar. TMAF Farm Manager David Jones summarises the impact on his own cropping at Morley Farms and makes his predictions for the coming harvest.

Many farmers have said to me that they'll be glad when this cropping year is over and we can start again. But they said that in 2012 because it was too wet and in 2011 because it was too dry. The point is that if you're going to grow crops outside you have to adapt and deal with whatever is put in front of you.

In November when I was asked "are you drilled up?" I said "YES", because we'd decided not to drill any more wheat. The drill was washed down, put away and we focused our attention on other autumn farm work, for example cutting hedges.

I then had a seed merchant encouraging me to grow some combining peas. 2013 seemed a good time to try a new crop as everyone was growing spring barley. The peas are in a field after sugar beet, that was lifted and ploughed in good conditions, so the important point is that the crop had a good and level seedbed. The peas were drilled on 3rd April and have never looked back. It's not over until it's over,

but they do look quite exciting.

Back to the wheat: the cold February, March and April meant we had to replace our early fungicide and plant-growth regulator programmes. It also reduced weed growth, particularly blackgrass, and finished off any slugs.

Fortunately this farm does not have much blackgrass, partly to do with soil type and double spring break crops. In the past many fields have had been sprayed with the grassweed herbicide 'Atlantis' to control the odd blackgrass, brome, and wild oats, but by March I couldn't find any weeds and in any case it was too cold to use the herbicide. However, now I wish I'd done more as there is brome popping up all over the place.

Like all farmers we're not immune from pest damage, losing about 12% of our oilseed rape crop in the winter to pigeons and rabbits. Some of that area is now fallow and some has been drilled with sugar beet. It also delayed flowering in 20% of the oilseed rape but we're confident about the



Sugar beet has replaced some of the failed oilseed rape crop

remainder of the crop. On another positive note the sugar beet was touching across the rows a whole week before the Norfolk Show and plant counts revealed a healthy average of 100,000 plants/ha.

My prediction? Harvest 2013 is going to be as good as any, all be it ten days later than we would prefer. But talk is easy so look out for the autumn edition of Morley News for the final harvest report.



## **TMAF** expands farm operations

The Morley Agricultural Foundation has increased its land and property portfolio with the purchase of a farm near Wymondham in Norfolk.

Burfield Hall Farm is two miles east of the main Morley Farms holding and includes a farmhouse in need of updating, modern farm buildings currently used for non-agricultural storage and 86.2 ha (213 acres) of Grade III arable land.

TMAF's farm manager David Jones already knows the farm



The arable land has been contract farmed by Morley Farms for the past six years

well. "We've contract farmed Burfield Hall for the past six years and are fully conversant with the soil type and cropping potential of the land, so for us it's business as usual continuing the current rotation."

The previous owners made the decision to sell the farm in early 2012 and offered TMAF first refusal, with the Foundation taking control of the holding by autumn 2012. With the arable land already accounted for TMAF then had to decide what to do with the farmhouse and buildings.

"Because they are in the centre of the holding we have decided to retain the buildings and further develop their letting for non-agricultural purposes," explains TMAF Trustee Michael Gamble.

Business lease terms have now been agreed for three of the tenants TMAF inherited and the remaining business units are being actively marketed. The farmhouse will be modernised over the coming months and



The farm buildings are let out as business units

will be available to let on an assured shorthold basis from early 2014. TMAF is confident that the income from the house and buildings will more than match the returns from the equities portfolio and provides a sound long-term property investment for the Foundation.

"The decision to purchase Burfield Hall emphasises TMAF's policy of ensuring Morley Farms Ltd has sufficient land to make the commercial farming operations sustainable now and in the future. It also affords the opportunity of offering NIAB TAG more land for crop research and trialling programmes," concludes Michael.

## Morley Open Day success

The annual Morley Open Day once again attracted over 200 farmers and advisors from across East Anglia.

The June event is organised by NIAB TAG as part of its National Agronomy Centre (NAC) initiative, an independent, charitably funded programme supported by TMAF. The NAC works with industry partners to communicate wider openly-funded research for the benefit and improvement of UK crop productivity and helps to promote best practice for profitable, sustainable and efficient arable crop production.

"The event was based around yield, environment and soil. Advice on achieving higher yields, cereal disease management, blackgrass control and variety choice featured highly on most visitors' wish lists following yet another difficult growing season. Our range of indoor seminars, exhibits, field trials, spray nozzle demonstration and a 'hole in the ground' soil profile provided additional guidance for visitors," explains NIAB TAG's Ron Stobart.

The event was supported by on-site exhibits and presentations from HGCA, the Royal Agricultural Society of England, the Centre of Contemporary Agriculture, NIAB Innovation Farm, the Game and Wildlife Conservation Trust, PGRO, John Innes Centre, Rothamsted Research, Agrovista and HL Hutchinsons.



Bill Clark on managing high yielding wheat crops



Patrick Stephenson advises visitors on wheat variety choice

## Trustee's profile

The Morley Agricultural Foundation is run by a Board of Trustees, appointed by an Advisory Council. Morley News continues its series of Trustee Profiles and talks to TMAF Trustee Michael Gamble.

#### Do you work in the agriculture sector?

I'm a partner in the firm Irelands Chartered Surveyors and Agricultural Auctioneers, which has been practising in Norfolk since 1860. I first joined the firm in 1965 and have worked there ever since, apart from a year out in Australia on a Young Farmer's exchange trip after I qualified.

I act for both landlords and tenants in all matters of rural surveying and auction sales of livestock, farm machinery and property. I'm also a Fellow of the Royal Institution of Chartered Surveyors and a member of the Central Association of Agricultural Valuers.

### Why did you become involved with TMAF?

I've always been a keen supporter of the charity and its work. My father, who was a local farm manager near Wymondham, instilled in me just how unique it was, being one of the few farmer-owned research organisations in the country. One of my first recollections of Manor Farm Morley was assisting in the dispersal sale of

livestock and equipment for the outgoing vendor in 1965; the then Norfolk Agricultural Station had just purchased the farm.

I was first appointed to the Executive Committee of the then Morley Research Centre in the early 1990s and since the formation of TMAF I've been responsible for all its property matters.

#### What's your role at TMAF?

I advise the Board Trustees, farm manager David Jones and company secretary David Pask on all matters relating to the charity's freehold property. During my time with TMAF we've sold off redundant buildings for conversion as well as the Old Rectory, which housed the original offices. I've also overseen the building of the new Morley Business Centre and purchased two farms and various blocks of land to add to the charity's portfolio.

For the past 14 years I've also been a governor of Easton College, the last five as chairman. TMAF has great links with the college and my involvement with both organisations has further



TMAF Trustee Michael Gamble

strengthened these links. There will come a time when the present Trustees will hand over to a new generation; I believe that we leave a legacy of sound property investment that not only provides an income, but also provides for the experimental work carried out by our other research partners.

Are you passionate about food and farming?

Do you think you could contribute to TMAF?

If you are interested in becoming an Advisory Council Member please contact David Pask by email (david.pask@tmaf.co.uk) or phone 01953 859630.

#### **Joining The Morley Agricultural Foundation**

If you are interested in supporting our work and wish to become a Friend of The Morley Agricultural Foundation please contact TMAF Secretary David Pask by email (david.pask@tmaf.co.uk) or phone 01953 859630.

There are no costs involved and TMAF is actively seeking new supporters who are part of the agricultural industry and are genuinely interested in the Foundation's work.

