



# MORLEY NEWS

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## THE MORLEY

AGRICULTURAL FOUNDATION

[www.tmaf.co.uk](http://www.tmaf.co.uk)

## A farming education

Welcome to the Autumn 2014 edition of Morley News.

Throughout the history of TMAF, right back to its roots as the Norfolk Agricultural Station, its primary role has been to demonstrate and educate about agricultural techniques.

Agriculture as a career became 'unfashionable' during the 1970s and 1980s when milk lakes and grain mountains attracted public disfavour. As a consequence, in

the UK and worldwide, the industry has lost an entire generation of researchers and still finds it difficult to excite young people to consider careers in agriculture and food.

TMAF is dedicated to reversing this trend, working with schools, colleges, academia and industry to showcase and further develop the very best of Norfolk,

East Anglian and national food and farming.

Agricultural education at all levels is now seen by the Trustees as increasingly important.

Our newsletter provides a selection of TMAF's work in this field over the past year.



Nick Steed  
TMAF Chairman

## TMAF welcomes international students

**Three years ago, overseas students from the University of East Anglia's School of International Development visited Morley to learn about UK agriculture. The link began after TMAF trustee Philip Richardson completed a UEA Masters degree in development studies and climate change.**

"I was struck by the lack of agriculture and food topics on the courses. Most of the UEA MSc students come from countries where agriculture is a very significant part of the economy. These students are likely to occupy important roles within those countries, so I thought it important to try to improve their appreciation and knowledge of the industry," explains Philip.

Following the success of the first trip around 30 students now visit Morley each spring. The Morley Farms team demonstrates modern agricultural practices, crops and machinery and NIAB's work is regarded as a template for practical research and extension work.

"It's a great opportunity to discuss with them the development of agricultural policy, comparative world agriculture and the challenges facing the industry worldwide with increasing population, changing diets, environmental degradation and climate change," says Philip.



### IN THIS ISSUE:

Online access to TMAF research

The past catches up with Morley Farms

Soil bugs limiting oilseed rape yields

From primary school to university

Trustee's profile

# Online access to TMAF research

Helping farmers access impartial crop research that can inform or be directly translated into management practices on farm is a major objective for TMAF. The charity helps fund NIAB TAG's National Agronomy Centre (NAC) initiative, with its crop and soil research demonstrated at Open Days and results available online, accessible through the NIAB website.

Further information on the NAC initiative is available at [niab.com](http://niab.com) under Research/National Agronomy Centre/NAC research projects along with a range of freely available technical information. A yearly £75 NAC Supporter subscription can further support the NAC and also provides access to more of the project's research, technical information, publications, videos and news online and in print. There are likely to be further website developments over the coming months so keep dropping in to take a look.

*NIAB TAG's  
Ron Stobart  
demonstrating  
TMAF-funded  
crop research*



The screenshot shows the NIAB website interface. At the top, there are logos for NIAB, NIAB InnovationFarm, and NIAB TAG. Below the navigation bar, the main content area is titled 'NAC research projects'. It includes sections for 'National Agronomy Centre research information', 'Farming Systems Research', and 'The STAR Project - Sustainability Trial for Arable Rotations'. A sidebar on the left contains a menu with items like 'Home', 'About Us', 'News & Events', 'Technical Services', 'Research', 'Crops & Agronomy Research', 'Genetics & Breeding Research', 'Crop Transformation', 'National Agronomy Centre', 'NAC research projects', 'Join the NAC', 'NAC results', 'Site Spray Applications Unit', 'Research Publications', 'Resources', 'BBSRC Doctoral Training Programme', 'Membership', 'Training and Education', and 'Shop'. A search bar is located in the top right corner.

Check out the new-look TMAF website at [www.tmaf.co.uk](http://www.tmaf.co.uk) for more information on our funded research projects, the farm and charity work.

## The past catches up with Morley Farms

Modern farming has brought about many changes to the rural landscape, but we often think of the countryside in the past as unchanging or static, writes Dr Tim Pestell, Senior Curator of Archaeology at the Norwich Castle Museum and Art Gallery.

But nothing could be further from the truth. Metal-detector users Mark Dover and Damien Alger have spent the past few years uncovering how people have lived and worked around Morley in the past. Both are members of the Norwich Metal-Detectors club and have been working with TMAF farm manager David Jones and archaeologists from the Norfolk Finds Identification and Recording Service based at Gressenhall.

Their finds have shown activity from all major periods, ranging from prehistoric flint tools, through the Bronze Age, Iron Age, Roman, Anglo-Saxon and Medieval periods to the modern day. They have discovered a previously-unknown 5th and 6th century Anglo-Saxon cemetery, identified through fragments of jewellery originally buried as grave-goods with the dead.

The most exciting find has been the discovery of a rather unassuming small bronze die used to strike *bracteates*, a type of pendant worn by women of that period. Such ornaments were a Scandinavian type of jewellery but this die suggests that examples were also being made in England, obviously following the fashions of their rich Nordic cousins. The find has now been generously donated to Norwich Castle Museum where it can be seen on display in the Anglo-Saxon and Viking gallery.



*Coins from across the centuries have been found*

# Soil bugs limiting oilseed rape yields

## TMAF support extends into university research.

Oilseed rape crop yields have remained pretty static since the early 1990s despite improvements in varieties and input management. Researchers believe that the yield loss may be associated with the build-up of soil-borne pathogens, particularly fungi and nematodes, within intensive rotations. TMAF is co-funding further research into the subject.

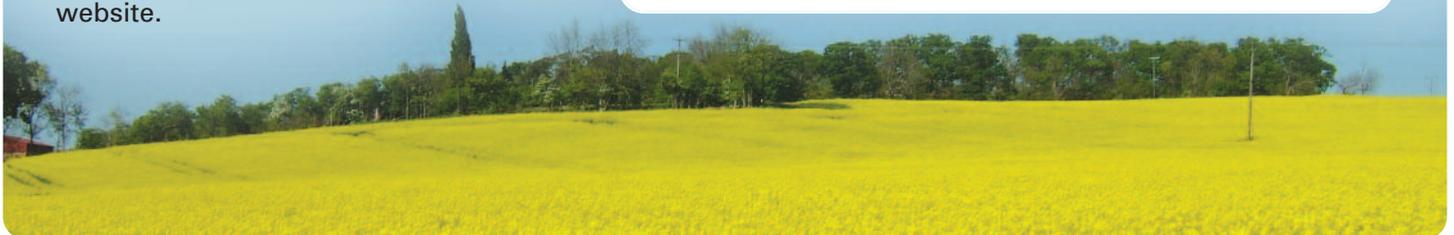
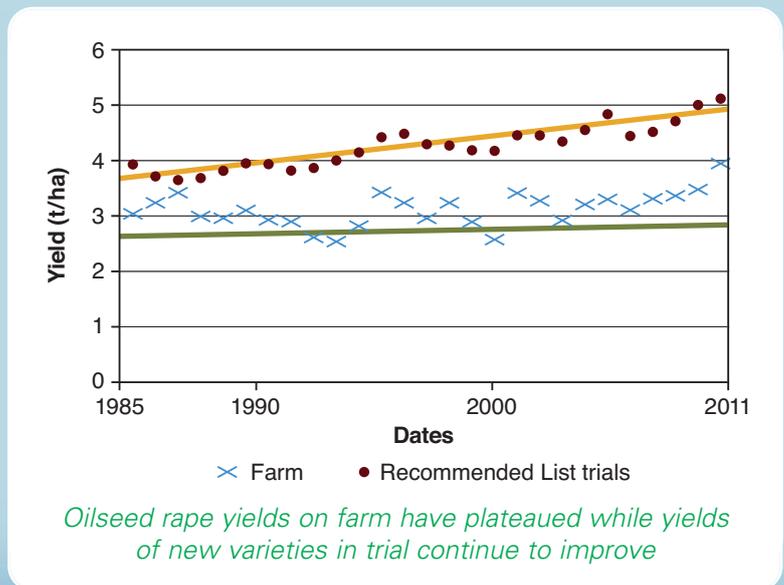
A previous study on rotations, funded by the national statutory levy board AHDB-HGCA and conducted at the Morley site, reported that several pathogen and nematode species are associated with high intensity rotations. "When present together in the soil, some species of fungi and nematodes can interact to form damaging disease complexes, leading to an increase in disease severity and reduced crop yields. Such complexes have been reported previously on a range of crops but not oilseed rape," explains HAU PhD student Alexander McCormack.

Alex's new research, funded by AHDB-HGCA alongside TMAF and the Felix Thornley Cobbold Agricultural Trust, will investigate the occurrence of six soil-borne fungal pathogens and Beet Cyst Nematode in oilseed rape crops and determine their contribution to yield loss. "I'm also examining whether these pathogens form disease complexes, potentially exacerbating the issues," says Alex.

For further details on 'Soil-borne pathogens of Oilseed Rape – assessing their distribution and contribution to yield decline' go to <http://bit.ly/ZqXOFe> on the Harper Adams University website.



*Oilseed rape stem showing Verticillium symptoms*



## From primary school to university

**Interacting with university students represents just one aspect of TMAF's role in education. TMAF Farms Manager David Jones works with local primary schools on including food and farming as part of their national curriculum studies – a role that continues right through secondary school and on to further and tertiary education.**

TMAF has recently increased grant support to Easton & Otley College, the Royal Norfolk Agricultural Association and the Suffolk Agricultural Association to develop a coherent strategy to increase interest in agricultural careers, and the provision of good grounding in agriculture at all levels – from field operative to post-graduate researcher.

"We continue to support individual PhD students carrying out research on the principal issues concerning arable farming, and in association with the Felix Cobbold Trust we fund annual courses in better communication techniques for those who talk to the media and others about the industry," says David.



*David Jones, TMAF Farms Manager*

# 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 Philip Richardson.**

## *When did you become involved with TMAF?*

I joined the Executive Committee of the Morley Research Centre in the mid 1980s, becoming Chairman on the retirement of John Cross in 1995. While Chairman I appointed Jim Orson as Director and completed negotiations to merge Morley with Arable Research Centres (ARC) to form The Arable Group (TAG), which provided coverage across all the major arable areas in England. I continued to chair TAG until 2006, just before the merger with NIAB.

## *So, you were involved in setting up TMAF?*

Yes, as part of this change, brought about by the need for large, professional organisations to bid for government and EU funding, the asset base of Morley, the farm and the share portfolio, was split from the research arm to form The Morley Agricultural Foundation (TMAF). This ensured ongoing control of Morley assets by local trustees in the spirit of the original concept of the Norfolk Agricultural Station by its founders in the late 19th century.

## *What's your role with TMAF now?*

I've been a Trustee of TMAF from its inception in 2003, and have continued in that role together with the chairmanship of the closely associated John Mann Trust and the Roger Harrison Trust.



*TMAF Trustee Philip Richardson*

## *Were you involved in farming outside of TMAF?*

Yes, my brother David and I had a 450 ha arable and pig production farming partnership which we began together in 1971. I retired from the arable farm in 2000, but retained the pig production business until fully retiring in 2010.

## *What are your interests outside of farming and TMAF?*

I've always taken a close interest in agricultural research and education. I served at various times over my career as a member of the MAFF Regional Panel, board member of Terrington EHF, Governor of Easton College, member of the MLC research advisory group,

and chairman of Norfolk FWAG. I'm currently a board member of Agri-Food Charities Partnership which helps charities in the sector work together and utilise their resources more efficiently.

Following my retirement I took a Masters degree at UEA in 2011, studying climate change and international development. I've since become a board member of the Centre for Contemporary Agriculture (CCA) which seeks to bring together the multiple expertises in agriculture and food research in the Norwich area. We want to create opportunities for more careers at all levels within the industry and to inform the public of the challenges faced by the sector over the coming decades.

## THE MORLEY

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