

Farming
Education
Research

Spring 2018

In this issue

Radish cover crop doing its job in the long-term rotations experiment at Morley

Morley Innovation Day

We welcome Dr Stephen Rawsthorne

Time for Less Facebook and More Face to Face

Updates from grant recipients:

- Kevin Hack
- Ellie Sweetman

Morley Business Centre
Deopham Road
Morley
Wymondham
NR18 9DF
Tel: 01953 859630
www.tmaf.co.uk

Registered charity No.
1097177

Radish cover crop doing its job in the long-term rotations experiment at Morley

By David Clarke, NIAB TAG Soils and Farming Systems Technician

Cover crops are increasingly being utilised to improve soil structure, build fertility, increase organic matter, prevent erosion and reduce pollution. The long-term New Farming Systems Rotations experiment at Morley supported by TMAF and the JC Mann Trust was set up with the aim to quantify and demonstrate the benefits and or limitations of different cover cropping strategies within different rotations.

The trial contains three rotations based around winter wheat with differing break crops, three nitrogen (N) regimes; 100%, 50% and 0% of farm standard and four cover crop approaches; an oil radish and oats mix, a five part legume mix, a white clover bi crop and stubble used as a control.

The 2017 winter wheat crop was harvested in good time with

the cover crops being drilled on the 16th of August. The reasonably warm autumn allowed all the cover crops to establish well, in particular the oil radish and oat mix showed very good establishment and canopy growth. Radishes are often advertised to farmers as good residual N catchers, reportedly capable of utilising half of the N left in the soil and releasing 10-50 kg N/ha in the following crop. The different N regimes in the NFS rotations trial at Morley provide a good demonstration of this potential. We recorded a 48% increase in oil radish green leaf area (1.08) in the 100% N plots compared to those that received 0% in the preceding winter wheat. This can be seen in the photos of a radish plot with the three nitrogen treatments labelled. This larger canopy is likely a

Morley Innovation Day

Thursday 21st June 2018
Starts 10am

New for 2018 - The Morley Innovation Day in Norfolk, showcases the latest arable advice and research from UK agri-businesses.

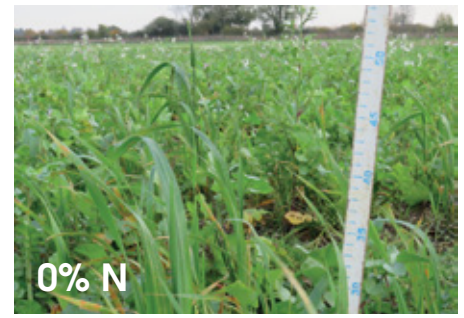
Working with the following organisations.



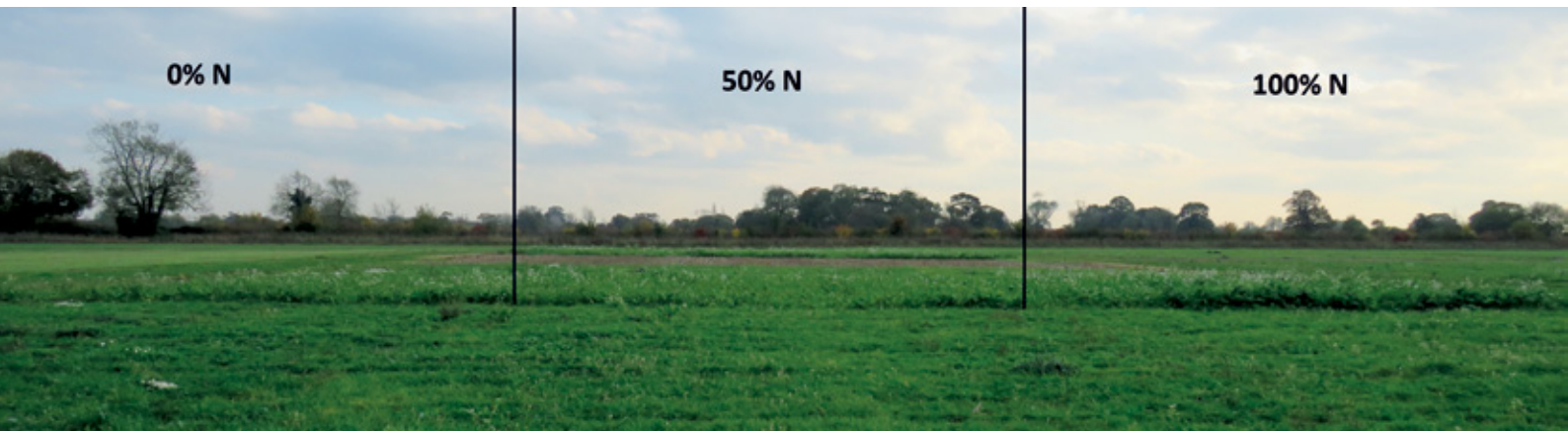
result of the radish utilising the larger amounts of residual N available in the higher N rate treatments.

The story becomes even more interesting in light of the small difference seen in available soil nitrogen results (0-60 cm) for the radish plots (16 kg N/ha) and stubble plots (18 kg N/ha). It is reported that brassicas contain c.50 kg N/ha for every

unit of green area. Suggesting that potentially over 50 kg N/ha has been prevented from leaching in the 100% N plots with a radish cover crop (green area=1.08) compared to the 100% N stubble plots. Whether this N capture will benefit this seasons spring barley remains to be seen, but radishes reputation as good N scavengers appears to be deserved.



For more information on the NFS trials at Morley and other farming systems work please visit www.niab.com/pages/id/292/Farming_Systems



Dr Stephen Rawsthorne

We welcome Dr Stephen Rawsthorne as a new member of the TMAF board. Steve is a retired research scientist with a BSc in biochemistry and a PhD in plant physiology. He studied plant physiology/biochemistry/genetics in the UK and USA before returning to lead a research programme at the John Innes Centre in Norwich. After twenty years of research and undertaking a wide variety of management roles he moved on to become the science operations manager at JIC. Steve brings his scientific expertise, enjoyment of nature, and care for the environment to the board. His support of TMAF is a family affair with his wife Dr Dee Rawsthorne adding her expertise in science and science communication as a member of the TMAF advisory board. They have been settled in Norwich since 1986 and love the life that Norfolk provides.





Time for Less Facebook and More Face to Face

By David Jones



You would think that the primary role of a farm is to produce food. 25 years ago, when I was at Harper Adams studying agriculture it was all about production. Marketing was a very small part of the course. The idea of Open Farm Sunday or inviting the local community to the farm didn't seem necessary. Opinions and attitudes have changed, we all question more, how and why things are made and the impact it has not only on the environment but also on mankind.

This winter when harvesting sugar beet, we did leave mud on the roads. We put out warning signs and spent the whole day sweeping the road. Morley farms quickly became the topic for discussion on Facebook, with people complaining about how their life had been sent in to turmoil for the day because of the local farmers. Everyone is entitled to their opinion but there is a difference in unloading your concerns to a closed group of friends to broadcasting it over social media. My first reaction was to reply with some ill prepared comments or go and bang on their door, which would probably end up with me regretting what I had said.

The world over, if we all have to live together

it would be more useful to take time to understand each other's perspectives. We all have opinions about everything railways/healthcare/governments. To me we are being responsible farmers, but I want know what their concerns are. It is important to understand what has formed that opinion, not just say it's wrong. Has it come from newspapers, tv, what their parents told them. We are not all immune to fake news. For the likes of Donald Trump the critics are far and wide. I hope the majority of Morley Farms critics live within 5 miles.

It's time for less Facebook and more face to face. I have invited a local group from the Morley beer festival and village hall committee to the farm for a look round followed by a BBQ, hopefully to renew some 2-way conversation about the food and farming, but also the local landscape.

This is something that many farmers should do in whatever form is relevant e.g. Open Farm Sunday/school visits or go to meet people in their own venues. As a minimum, share some pictures and positive stories on social media about the farm and not a knee jerk reaction rant about how people don't understand how vital it is to get sugar beet off the field today.

Finally in response to the grumpy local resident, I noticed someone else commented 'I saw the signs, it's a country road, I slowed down to drive to the conditions and if you eat sugar then this is where it comes from... and he had more likes that the original postee!!



Kevin Hack

**Course: BSc (Hons)
Agriculture (Year 2), Easton
& Otley College**

After a short career as an early years teacher my love of the outdoors, interest in growing vegetables and the need for inspiration led me to a new area of study - a degree in agriculture. I have no previous background in this area so the past two years have been a steep learning curve, albeit an enjoyable one. The course combines high quality subject expertise from the in-house college staff to the diverse range of guest speakers including University of East Anglia and the John Innes Centre. The practical aspects of the course have been enhanced by a range of site visits including British Sugar, Waveney Catchment Sensitive Farming, Elveden Farms, crop trials at Morley Farms. I have also attended many conferences and training events which have added to my learning, including RNAA and Agri-Tech events.

The diversity of topics on offer, from sustainable agriculture to business management have helped maintain my interest. I believe it is a major positive in encouraging new students to take up the course.

My student status has also opened links with BBRO, NIAB, AHDB, for news and technical updates. I have also taken part in trials at Morley Farm and am currently participating in a soil health survey with Rothamsted Research.

The degree programme has sparked an interest in agronomy and crop production science. I have also realised that livestock just isn't for me. I also combine my studies with working at Home Farm, Nacton, which has helped me understand the practical elements of the course including machinery operating, planning crop rotations and nutrient inputs plus how to deal with some of the problems posed by weeds, pests and diseases.

I have found that I am able to make use of skills from my previous career. Combining these with a positive attitude and enthusiasm has opened up new areas of interest and possible future careers for me.

Changing careers hasn't been easy, but the long term benefits are starting to appear. My family have noticed the reduction in my stress levels and, although the hours can be long in the summer months, they understand that I am working towards a change that will hopefully benefit us all. Yes it can be cold and wet out there but those sun-filled early mornings...

Ellie Sweetman

**Executive Master's degree in
Business Admin, UEA**



Agricultural trusts' grant funding has been a catalyst for both my professional and personal development.

TMAF, along with Chadacre and the Clan Trust have generously supported me in undertaking an executive Master's degree in Business Administration with the UEA alongside my full time career.

Whilst enjoying my role at Easton and Otley College for more than a decade, teaching subjects including Business Management, Agri-Environment and Livestock Production, the eMBA has broadened my appreciation of how industry functions, studying subjects including economics, marketing, operations management and consultancy.

Eager to continue my personal development and increase my involvement in industry, I have taken a leap of faith in pursuing a new career direction as NIAB's new Forage Crop Specialist, bringing together experiences from earlier in my career as well as from EOC and honing my technical knowledge with a renewed focus on sustainable food production.

Balancing work, life and MBA commitments can be a little testing at times but the skills gained whilst at EOC of team working, managing and prioritising workloads and resilience under pressure, have equipped me well.

I would like to thank TMAF, Chadacre and the Clan Trust for their support and will ensure they get good value for money in my continued contribution to agriculture, both in the region and nationally, and would also like to thank both EOC's Martyn Davey and NIAB's Elizabeth Stockdale for encouraging me in this not unsubstantial undertaking.

Finally, assuming I survive the next 12 months unscathed, I already have plans for the next big adventure... Dr Ellie has a nice ring to it!