

NE Organic Discussion Group

Newsletter



June 2021

Welcome to the June edition of the Newsletter.

Although the weather has improved it looks as if it will be a late season.

I trust those that need to, got their AECS submitted.

This month the Newsletter contains: -

Your chance to have a say about changes to the Tulloch Organic Rotation Trial.

An article about grazing residuals by the author of the article on grazing last month.

An introduction to the Organic Farming MSc. Dissertations which we hope to feature over coming months.

Information about the Woodlands Field trials.

Information about upcoming events, programmes and awards.

As ever, get in touch if you have any questions or want more information.

Tulloch Organic Rotation Trial

“Some of you may not be aware of the Tulloch Organic Rotation Trial located at SRUC Craibstone which is based on a 6-year rotation that was established in 1991 and has been managed to organic certification standards since then. This experiment originally compared two ley-arable rotations with contrasting lengths of ley (one being 4 years grass-white clover and 2 years cropping – the 67% ley rotation; the other a 3-year grass-white clover ley and 3 years cropping – the 50% ley rotation). In both cases, grass-clover plots were either cut for silage, or grazed with sheep. Farm yard manure (FYM) return to key points in the rotation were based on estimated manure production by the livestock that were supported by the crops and grass-clover grown each year. After the end of the 2006 season, data indicated that there had been little divergence between the two rotations in terms of productivity, or soil parameters such as P and K availability or soil organic matter (SOM). After consultation with a small focus group of stakeholders, a decision was made to retain the 50% ley rotation, but split the plots so that instead of just spring oats being grown after the grassland phase, which had been the case up until that point, one half of the plot continued to grow oats at this point in the rotation, while the other half of the plot was used to grow spring barley and the rest of the rotation remained the same, thus ensuring there were two subtly different stocked rotations running in parallel from 2007 onwards. The rotation that had consisted of 4 years grass-clover and 2 years cropping (ley spring oats and undersown spring oats) was converted to a stockless system in 2007. This was partly driven by the Organic Action Plan at the time pushing for more wheat and vegetables to be produced organically. The stockless rotation consisted of a one year cut and mulch grass-red clover fertility building phase followed by 5 years of cropping, which included undersown spring cereals (including wheat) and field beans as well as potatoes. In order to push the stockless system, no external manure or composts were applied, and no livestock grazing took place. Straw was chopped and incorporated on cereal

and bean plots. Again, as with the 50% rotation, plots were split so that two parallel rotations could take place, one with undersown spring wheat followed by potatoes after the cut and mulch phase, the other with potatoes followed by undersown wheat at the same point in the rotation. In both cases, these were followed by undersown spring beans, undersown spring barley and undersown spring oats. The stocked system is holding up well with regard to crop yields, quality and soil qualities, and despite the minimal inputs, the stockless system has also performed much better than expected over the last 2 and a bit rotational cycles since it was implemented, although a few issues are just starting to creep in which we are keen to address. Similar to the approach used to make the changes mentioned in 2007, we are planning to hold a series of small focus groups over the next few months to garner ideas about what organic stakeholders believe we should focus our research on and that we can utilise these plots as a tool to test some of the ideas in the new funding cycle which starts in April 2022. If you might be interested in being part of a focus group, we'd be keen to hear from you, and you can contact either Prof. Christine Watson (christine.watson@sruc.ac.uk) or Dr. Robin Walker (robin.walker@sruc.ac.uk) to let us know of your interest. The Tulloch Organic Rotation Trial is now part of ACE, the Aberdeen Cropping Experimental Platform which includes a number of other crop trials."



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Grazing Residuals

We often quote 1500 kg DM/ha (around 4-5cm) as a target grazing residual (post-grazing height) to those starting rotational grazing. However, residual management needs to consider the balance between livestock performance in the short term and pasture quality and quantity into the future. The balance changes according to the season and the conditions of the year.

In spring and early summer, the grazing livestock are the priority. Consider the most demanding stock: ewes and twin lambs and growing cattle, these groups should not be made to graze tight, therefore no less than 5 cm. However, particularly this slow grass growth year so far, you still need to keep an eye on future pasture productivity and quality. Graze below 3 cm and you affect the plant regrowth, leave more than 6 cm and you will struggle with quality in the next round. During this time, we are trying to keep the plant leafy when it wants to head, maintaining quality takes grazing pressure. In addition, you want to encourage any clover present to grow. In summary, 4 – 5 cm is the target at this time. If it becomes dry, leave longer grass if possible.

Later in the season, future quality is less of a concern. You will have more groups of stock available to tidy up in the next rounds – weaned ewes and cows – and the plant is less likely to reduce in quality. Again, the priority groups of stock are more important than the pasture and you may even increase the residual in light of this; let these groups take the best pick of grass and keep them growing.

Into the autumn and winter, the grazing residuals start to become influential to spring production and quality. Providing the grass is getting a decent rest through the winter (~100 days), tight grazing (3 cm) will not impact future growth but it will benefit spring grass quality. At this time, you should have some groups that can be used to do the tidy up job when they are not sensitive to poor feed quality (e.g. weaned fit ewes pre-tupping, weaned cows, etc.).

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It's the end of another busy academic year. Despite the trials and tribulations that faced some of them in completing their research under lockdowns in various parts of the UK and beyond, our MSc Organic Farming students all completed their dissertations and we are delighted with their success.

We hope to be able to bring you summaries of their projects in future editions of the newsletter, particularly as I suspect some of you may have been in the pool called on to complete surveys on a variety of topics. In the meantime, here are the project titles:

Significant factors in effective weed control strategies for UK organic arable crops.
Climate Change Mitigation in Organic Farming.
The Effects of Composted Animal Manure, Pelletised Chicken Manure and a Consortium of Microbes on the Yield, Quality and Soil Parameters of Baby Leaf Brassicas.
Measures to Improve the Economic Sustainability of Scottish Less Favoured Area Organic Livestock Farming.
"Carbon Neutrality", is this a viable target for Irish Organic Farms to aim towards and if so, how can this be achieved?
The potential of heritage wheat as a crop for cultivation in Ireland.
An evaluation of the potentials and limitations to increase the percentage of grass-fed in organic dairy systems in Ireland.
Testing the efficacy of a liquid chicory drench (<i>Cichorium intybus</i>) as an anthelmintic for lambs on an Irish organic sheep farm.

If anyone would like more information about the Organic Farming programme, visit <https://ww1.sruc.ac.uk/courses-training/course-catalogue/organic-farming/msc-organic-farming-2021/> or email Programme Leader Lou Ralph on lou.ralph@sruc.ac.uk

Woodlands Field

Some of you may remember we visited Woodlands field at our first meeting back in 2017. Videos have been produced for both trials and they are interesting watching.

Link to Woodlands Field Old Rotation videos

Technical video (<https://vimeo.com/242278226>) & Timelapse video (<https://vimeo.com/309868507>)

Link to Woodlands Field pH Rotation videos

Technical video (<https://vimeo.com/242280854>) & Timelapse video (<https://vimeo.com/314837610>)

Although dating back to July 2018 summary handouts were produced for each trial and if you would like a copy please let know and I will send them out of you can download from the FAS site as I will get them uploaded there.

Upcoming FAS Events



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Jul

[Trees and carbon capture – the science](#)

Time: 6:00 pm

Can trees really help combat climate change, and how? If you've ever wondered "what's the evidence that tree planting targets will work?" join this webinar on Tues 6 July to hear the answers.

[Read more >](#)



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Jul

[Net Zero Arran Discussion Group](#)

Time: 8:00 pm

While carbon and climate are driving policy for Scottish agriculture biodiversity decline cannot be ignored and nature conservation cannot be compromised in the pursuit of climate change wins. We have...

[Read more >](#)



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Jul

[Compost and Growing Media](#)

Time: 7:30 pm

Do you have a horticultural enterprise on your croft or smallholding? Do you buy or make compost or growing media? Do you get variable results?! Join Audrey Litterick for a...

[Read more >](#)

Rural Leadership Programme



<https://www.scottish-enterprise.com/support-for-businesses/improve-productivity-and-employee-engagement/optimize-your-team-performance/rural-leadership-programme>

Leadership programme aimed at rural businesses

Rural Leadership Programme 2021-2022 applications are now open to all rural Scottish businesses and employees who want to develop their skills and grow.
Closing date 23 August 2021.

www.scottish-enterprise.com

Young Organic Farmer/Grower of the Year Award 2021



Are you, or do you know, a forward-thinking, innovative young organic farmer or grower who is passionate about implementing organic principles, has proven the ability to inspire others and deserves recognition for their work? If so, enter our new Young Organic Farmer/ Grower of the Year Award!

[Find out more here](#)