

NE Organic Discussion Group

Newsletter



October 2021

Welcome to the October edition of the Newsletter.

Autumn is well and truly here. The weather has been mixed as have reports of the harvest but overall, I think it has been better than expected.

This month the Newsletter contains a mix of articles and news. As we are coming towards winter, I thought I would include the take home messages from a couple of meetings we had looking at livestock nutrition over the last couple of years. There is also a summary of a SRUC Organic Farming MSc Dissertation and an article outlining the benefits of the Premium Cattle Health Scheme membership. Then we hear how mixed legumes have been found to enhance yields while benefiting pollinators. At the end there is the usual news section which has a bit about the 2021/2022 Farm Management Handbook, the extension of AECS funding and upcoming meetings. Do not forget to book your place for our virtual farm tour of Balcaskie Farms on the 4th November at 7.30pm.

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

Take Home Messages Suckler cow and ewe nutrition looking forward to winter

Dr. Lorna MacPherson, Dairy Consultant, SAC Consulting Solutions (who also has experience on rationing for beef cows and sheep) gave a presentation on suckler cow and ewe nutrition looking forward to the winter in September 2019. Her take home messages were: -

- Get your silage analysed so quality is known. Do a forage budget to work out how much tonnes of dry matter are available. May be worth doing this year if you have very wet silage.
- Take advice on rations so that dry cows calve at their target condition score. High energy silages are great but not so appropriate for dry suckler cows. Forages with good protein levels can be fed with straw to fill cows up and meet requirements. Watch low protein, high energy silages, especially if adding straw. Supplementary protein will be necessary for rumen function.

- Target your forages to the different groups of livestock on your farm. Poorer quality forage can go to dry cows, with better quality forage for lactating cows, 1st calvers and growing heifers.
- Management is important – start planning early and split dry cows according to condition for feeding. Separate thinner cows or 1st calving heifers, which are still growing, for a higher energy ration.
- For lactating cows make sure they do not lose too much condition after calving and that they are on a rising plane of nutrition 6 weeks before bulling for good fertility.
- For ewes, body condition score is an important management tool to maximise fertility and lamb output. Target BCS 3-3.5 for lowland ewes at tugging and prioritise good grass at 6cm for underconditioned ewes for 6-8 weeks before tugging. It takes time to alter condition – 6 to 8 weeks on good grass to alter by 1 CS unit.
- Don't forget the tups! Aim for BCS 3.5-4 at tugging as they can lose up to 15% over the tugging season. Supplementary feed is necessary for 6-8 weeks pre-tugging if BCS is below 3.5.

Take Home Messages

Mineral & Trace Element Nutrition

The top tips from David McCelland, technical director at Norvite and Mary Young a livestock nutritionist with SAC Consulting from a meeting on 25th August 2020 were: -

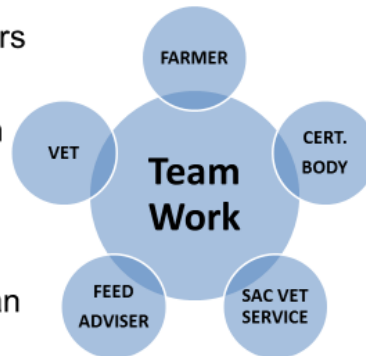
- Ensure supplements are Organically 'approved'
- Have forages analysed for minerals (not annually but every few years)
- Have forage mineral results interpreted and use appropriately
- Ensure good dialogue within your team (vets, nutritionists & suppliers)
- Get the balance right - too much of a good thing can be bad!

Key minerals and vitamins for sucklers

- Magnesium
 - Lock up effect of potassium
 - Staggers
- Iodine
 - Still born calves, poor growth rates, fertility (irregular oestrous)
- Selenium/vitamin E
 - Iodine link, muscle weakness, retained cleansings, fertility
- Copper
 - Anaemia, infertility, poor performance
- Cobalt
 - Rumen production of vitamin B12
 - Energy requirement in rumen and animal

Managing derogations

- Work with trusted advisers
- Build an evidence base
- Justify need and work on mitigations
- Derogation reviewed annually
- HERD/FLOCK health plan



Premium Cattle Health Scheme – Glenrinnes Farms Benefits From Membership

The SAC Premium Cattle Health Scheme (PCHS) enables you to control and eradicate disease from your herd. Herd health schemes aim to improve overall cattle health and welfare and increase productivity and therefore profitability of businesses who become members. Control of infectious diseases such as Johne's disease is beneficial for your herd whether you are a commercial or pedigree beef herd. Buyers of breeding replacements are placing more emphasis on health status and breed societies are increasingly demanding stock (bulls and females) are sold with certified accredited health status.

Glenrinnes Farms have been members of the Premium Cattle Health Scheme since November 2007. Glenrinnes is an organic mixed hill farm extending to over 4,500 acres of hill and rough grazing ground managed by former SAC business manager Alister Laing. The farm has a suckler herd of 160 commercial cows as well as a pedigree herd of Shorthorns.

Initially the farm joined the health scheme with the pedigree herd allowing pedigree stock to be sold at society sales however the shorthorn herd is run commercially alongside the commercial cows so the decision was made to enrol the entire herd into the health scheme for ease of management and a focus on improving herd health.

The herd is BVD accredited and currently Johne's Risk Level 2 (since 2019). Stockman Glenn Dean has noticed the herd benefits of focussing on health, routinely testing and disease monitoring. Since testing for Johne's disease the farm have noticed increased fertility and conception rates with cows milking more. Glenn described the herd as *'overall a healthier herd.'*

With producers actively looking to buy from herds with a known health status, Glenrinnes plan to start to sell bulling heifers with 'Hi Health Status' at breeding sales. *'Customers are looking more closely at health status when buying heifers as replacements in particular looking to buy from herds who are Johne's testing and or accredited free of the disease. Buyer confidence is something which is important to us when selling our stock'* – Alister Laing.

Another benefit to membership of the SAC Premium Cattle Health Scheme is that breeding stock tend to have an increased sale value because they can be accredited as 'disease free' of diseases such as Johne's, IBR and Leptospirosis giving buyers the confidence that they are not buying in a disease.

For more information on the SAC Premium Cattle Health Scheme please refer to their website - <https://www.sruc.ac.uk/business-services/what-is-your-goal/veterinary-laboratory-services/cattle-health-schemes/premium-cattle-health-scheme/>

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SRUC Organic Farming MSc

You might remember that back in June Lou Ralph the Programme Leader for the SRUC Organic Farming MSc said “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”

We are now able to bring you some project summaries. I hope to include one per edition over the next few months. Below is the first.

The potential of heritage wheat as a crop for cultivation in Ireland.

Summary from MSc dissertation shared with the kind permission of Grace Maher, MSc Organic Farming 2021

Wheat is one of the world’s most widely consumed cereals. Wheat is linked with the evolution of our ancestors from nomadic communities to settled civilisations, and it resonates loudly in the woven fabric of our shared cultural history. Heritage grains are witnessing a ‘revival’ largely generated by a renewed interest in the quality of flour available for baking. Heritage wheat cultivars exist in many gene banks around the world, but the volume of these cultivars grown commercially is almost non-existent.

In Ireland no research has been conducted on organic wheat production, for either modern or heritage cultivars. The aim of this dissertation is to explore the potential of heritage wheat as a crop for cultivation. In 2020 a field study was carried out on three organic farms in Ireland to ascertain the viability of spring heritage wheat cultivars. One modern cultivar was used as a control.

Results from the field study showed no significant yield difference between the modern and heritage cultivars. Yields were low, but in line with other research on heritage cultivars in other countries. All the cultivars in the study achieved high protein levels which were above requirements for organic milling wheat. The crop architecture of these heritage cultivars can offer some advantages in organic farming systems especially in weed suppression.

While recognising the limitations of a one-year field study, albeit conducted on three organic farms, the results show that there is potential to cultivate heritage wheat in Ireland. Organic arable farmers primarily focus on oats due to market demand, however wheat is an alternative crop that should be considered to extend and diversify rotations. Heritage cultivars are a niche crop, and more research is required to fully explore their capacity and adaptability to agricultural, environmental and market variabilities.

Buzzing about beans



Legumes such as field beans and clover can help mitigate pollinator declines.

The targeted use of mixed legumes in agricultural systems could enhance yields while protecting pollinators, new research by SRUC has found.

Protein-rich legumes deliver a range of agronomic and environmental benefits including providing a substitute to meat-based proteins for human consumption; decreasing requirements for imported soybean in livestock systems; and – by fixing atmospheric nitrogen – reducing reliance on inorganic fertilisers and suppressing weeds and diseases.

In addition, legumes such as field beans and clover, provide sugar-rich nectar and protein-rich pollen, helping to mitigate pollinator declines.

However, their value to pollinators under their current implementation and management is questioned.

Researchers at SRUC looked at a range of nitrogen-fixing crops grown as monocultures and mixtures and compared their performance in providing forage for a variety of pollinators, from bumblebees to hoverflies.

They found that mixtures did not consistently provide more forage for pollinators, with vetch and beans preventing lower-lying species such as white clover from flowering.

Instead, the use of targeted mixtures – using legumes which bloom at different times during the summer and have a variety of flower structures – provided a more stable source of forage throughout the season and fed a wider number of species.

However, researchers said legumes could not provide all the resources pollinators require and should be combined with other agri-environmental options such as hedgerows, woodlands, areas of rough tussocky vegetation, ponds and ditches.

Lead researcher Lorna Cole, an Agricultural Ecologist at SRUC, said: “Legumes will play a critical role in future agricultural landscapes, from providing healthy diets to reducing the need for inorganic fertilisers.

“Our research highlights that with small tweaks in implementation and management, they can also provide valuable sources of forage for insect pollinators.

“We need to act now to reverse pollinator declines and farmers can play a vital role in saving our pollinators.”

The study, which was supported by the Scottish Government, Mains of Loirston Charitable Trust and Horizon 2020, was carried out on small plot field trials in Aberdeenshire and Midlothian.

For more information on this work please contact:

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Farm Management Handbook 2021/22

Farmers' handbook highlights need to address climate change



The new handbook provides information on measures to reduce emissions and sequester carbon.

With COP26 starting in Glasgow this month, reducing greenhouse gas emissions should be a top priority for all businesses – including farms.

This is the message from SAC Consulting which, with the support of the Scottish Government's Farm Advisory Service, has published the 2021-22 Farm Management Handbook.

Available [online](#) and in print, the handbook contains a new section on carbon and a standalone pollution section which summarises some of the main impacts on air, water and land quality from agricultural practices

It also has a significant revision to the beef, sheep and dairy gross margins and basis of data and updates to price levels within each of the sections.

In terms of contributions to total Scottish greenhouse gas emissions in 2018, agriculture was third on the list behind transport and business.

With agriculture coming under the spotlight, the handbook provides information on practical mitigation measures to reduce emissions and sequester carbon, including the use of carbon calculators.

Editor Alastair Beattie, an Agricultural Consultant at SAC Consulting, part of SRUC, said: "It is now widely accepted that all businesses, including farms, will have to take action to reduce greenhouse gas emissions responsible for driving climate change.

"The Scottish Government has set ambitious targets to reduce greenhouse gas losses across Scotland, with an interim goal of a 75 per cent reduction in emissions by 2030 (against a 1990 baseline), with the aim of achieving net zero emissions by 2045.

"As other sectors cut their emissions, it is anticipated that the contributions from farming activities will gain more prominence. However, the agricultural sector has the potential to be part of the solution to climate change.

"Through improving technical efficiency and using new technologies and techniques, alongside implementing land management practices which can store or 'sequester' carbon, removing it from the atmosphere and locking it into soils, vegetation and trees, the agricultural sector has a key role to play."

A printed version will be available soon from SAC Consulting for £30 plus postage and packaging. To order a copy, to find out more or to view the publication free online visit the [Farm Advisory Service website](#).

More information on practical mitigation measures and steps farmers are taking to reduce emissions and sequester carbon is available at the [Farming for a Better Climate website](#).



Funding – AECS

The Agri-Environment Climate Scheme has been extended until 2024 (with a new application round each year). Farmers, crofters and land managers will be able to apply for funding aimed at promoting low carbon farming and protecting the environment.

The 2022 application round will be a full round including organic conversion and maintenance and the scheme guidance, which is currently for the 2021 restricted round, will be updated before the round opens for applications.

Details of each further round will be announced in due course and the AECS web pages updated.

As the details are known I will provide updates but if you have any questions please get in touch.

Meetings

Virtual Farm Tour

Don't forget to book your place for the virtual tour of Balcaskie Farms, East Nuke of Fife. It is on the 4th November at 7.30pm. There was some Background information in last month's Newsletter. Follow the link to book <https://www.fas.scot/events/event/neo-organic-discussion-group-virtual-farm-tour/> or for more information get in touch with me on 01343 548787, 07979245908 or aileen.buchanan@sac.co.uk

Make the most of your muck (AHDB webinar)

What the webinar will cover...

Wednesday 3 November (7:00pm–8:30pm)

Speakers: Dr Lizzie Sagoo (ADAS) and James Holmes (AHDB)

Join us for the November webinar where we will be looking at how to make the most of muck.

With the costs of artificial fertiliser being so high, and the challenges caused by the Farming Rules for Water limiting the autumn use of muck, we will look at how we can optimise their use to maximise their nutrient values to provide the best value to crops.

There will be an opportunity to ask questions at the end of the session.

Although the webinar is free to attend, please register.

Following registration, you will receive a joining link (you can either watch live or catch up later).

Find out more about the webinar as well as other upcoming events below, and visit the AHDB events website for details of local meetings <https://ahdb.org.uk/events>.

Biodiversity and alternative food products

November 2, 2021, 7.00pm -8.30pm



Increasing biodiversity of both the farm environment and what it produces, is seen as one of the ways in which farming businesses can remain sustainable in the future.

This event will examine what this means in practice by hearing from some Scottish businesses that have changed their management practices to increase both biodiversity and income on their farms.

We'll watch video footage from some Scottish businesses that are farming in a way that has increased biodiversity on their farm. These business owners will also join us as part of our panel.

Joining our guest panel will be:

- Marian & Simon Bruce from [Highland Boundary](#)
- Sascha & Hugh Grierson from [Hugh Grierson Organic](#)
- Davy McCracken from [SRUC](#)

There will also be an opportunity for those who attend to ask questions and discuss the process of creating a more biodiverse farm.