

MAY 2024 NEWSLETTER



INTRODUCTION

To state the obvious, it has been a very dull and wet start to Spring. The Isle of Man has received above average rainfall since December with it being the wettest April in history. There is no doubt that this has had an impact on farming activities, so this month's Knowledge Exchange newsletter and following Knowledge Exchange event will present ideas which may help farmers overcome some of the challenges brought on by the weather. We advise farmers to consider these topics and sketch a few of their own action points on a notice board or notebook to act as their own guide to utilise and implement some of the topics we discuss.

This month's newsletter will discuss.

- Silage – first and second cut preparation
- Restoring soil health and structure
- Should you grow forage crops?
- Alternative bedding solutions

SILAGE

Applications of both organic and inorganic manures have been delayed due to wet and waterlogged fields. Normally the recommendation for nitrogen would be based on target annual yield see below from The Fertiliser Manual RB209:

Target annual DM yield ^a	N application rate				Total N applied ^b
	First cut	Second cut	Third cut	Fourth cut	
t/ha	kg N/ha				
5-7	70	-	-	-	70
7-9	80	50	-	-	130
9-12	100	75	75 ^c	-	250
12-15+	120	90	70 ^c	30 ^c	310 ^d

To avoid large amounts of available N being present in grass it is normal to assume a take up of 2 units/day of nitrogen so for an application of 100 units – 125kgN/ha there should be a gap of 50 days since the last nitrogen application and cutting for silage if applied in one application. Despite the wet start to the year, heading dates for grass crops will change very little so, if you want good quality silage, aim for normal cutting dates, provided you meet the target time between the last application and cutting. Quantities are likely to be lower than normal but generally the advice is to go when the crop reaches the correct stage of maturity.

CONTACT

Tony Turner, Agri-Business Consultant, ADAS

E: tony.turner@adas.co.uk or E: Manxfarming@adas.co.uk

ADAS is a trading name of RSK ADAS Ltd, part of RSK Group Ltd. Head office: Spring Lodge, 172 Chester Road, Helsby WA6 0AR, UK

To make up for any shortfall on first cut try to do the following:

- As soon as the field is clear start applying fertiliser – delaying will only reduce yields.
- Use a higher rate of nitrogen for second and subsequent cuts to make up for any shortfall see the above table – target higher yields.
- Farmers must ensure they apply the correct amount of P and K for 2nd cut and subsequent crops.

RESTORING SOIL HEALTH & STRUCTURE

Good soil health and structure is paramount to optimising grass and crop growth. Where soil has been damaged by poaching or harvesting/spreading manures in wet conditions, care needs to be taken on how to restore soil health and structure to previous good condition. The best tool to understand soil health and structure is a spade. Farmers are advised to dig holes in various places across a field to assess the soil's health and structure. Only then should a farmer decide what to do next, especially when it comes to cultivations.

Please find the pictures below which are examples of both poor soil health and high compaction and healthy soil without compaction.



Low soil health, high compaction



High soil health, low compaction

MAY 2024 NEWSLETTER



ADDITIONAL FODDER PRODUCTION

The knock-on effect of poor weather is that grass growth is behind the 5-year average according to Grass Growth reports from the UK. Unfortunately, there is currently no data available, as yet, for Isle of Man farms. With the wet ground conditions there may also have been damage caused to the sward through grazing. This has led us to begin thinking about alternative forage production ideas. Forage crops can be used to grow additional forage for the winter months to take the pressure off early housing, extend grazing periods and mitigate a potential shortage of home-grown forage. Another benefit of considering forage crops is that it will give the farm a good entry into renewing grass leys after the fodder crop this autumn or next spring.

Swedes, kale, turnips, forage rape, hybrid rape/kale and fodder beet all offer potential forages for livestock.

WHAT CROP?

The first thing to consider is, what are you going to grow? This can be selected through the potential yields and nutritional value of the potential crop. However, the other important point to consider is when would you hope to graze the crop?. This will then give you a point to work back from to help you decide which forage crop to establish and manage. The table below allows farms to investigate sowing and grazing windows for different forage crops. This table has been taken from the AHDB

Crops	Sowing/Feeding	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Swedes	Sowing				X	X							
	Feeding	X	X	X	X						X	X	X
Kale	Sowing				X	X	X	X	X				
	Feeding	X	X	X	X		X	X	X	X	X	X	X
Stubble turnips	Sowing				X	X	X	X	X	X			
	Feeding	X	X	X	X					X	X	X	X
Grazing turnips	Sowing				X	X	X	X	X	X			
	Feeding							X	X	X	X	X	X
Rape/kale hybrid	Sowing				X	X	X	X	X	X			
	Feeding	X	X				X	X	X	X	X	X	X
Forage rape	Sowing				X	X	X	X	X	X			
	Feeding							X	X	X	X	X	X

ADAS is a trading name of RSK ADAS Ltd, part of RSK Group Ltd. Head office: Spring Lodge, 172 Chester Road, Helsby WA6 0AR, UK

WHAT FIELD?

The next consideration for the farm is, what field should be used to establish a forage crop? This might correlate with a cereal crop being harvested giving a good window to follow it with a forage crop or alternatively a grass field which has been irrevocably damaged during the poor weather conditions. Fields selected to grow forage crops should be well drained and light soiled for the best results. Farmers who find success with grazing forage crops often provide a loafing area of grass, alongside their forage crops. This gives livestock an area to fall back on.

SOIL

It is encouraged that farmers consistently test their soil and apply the nutrients which are needed, this rule of thumb does not change for establishing forage crops. Phosphate is important for establishing forage crops, so making sure this is available in the soil by having the correct PH. If it is not readily available, then the farm could consider how to provide the soil with what it needs. ADAS can help with soil testing and nutrient management plans to assist farms in the management of their soil.

Seed bed preparation can vary. Some farms opt for min till or direct drilling to establish the next crop. This is to try and maintain soil structure to make it easier to graze in the winter months. However, seed to soil contact is important and if the crop is going into a thick mat of grass more intense cultivations may be required.

SOWING

Effective seed to soil contact is important when establishing the forage crops mentioned. The seed should be drilled at around 1cm. Crop density is important, farms should research specific guidance on seed population when establishing their forage crop. Farms have the option of drilling and/or broadcasting their seed. Rolling should be considered to ensure the seed to soil contact (see table below).

One piece of research stated 'Kale, rape and turnips can be sown at 6kg/ha or broadcast at a higher rate of 7.5kg/ha. Swede and fodder beet has a different type of seed and should be precision drilled at 1.2kg/ha.'
lth, high compaction

ONGOING MANAGEMENT

Slugs are something the farm may have to carefully manage. The farm may wish to use slug pellets when establishing their crop.

MAY 2024 NEWSLETTER



ONGOING MANAGEMENT

Broadleaf weeds may be an issue but if an effective stale seed bed is maintained before sowing these could be minimal. As a result, ongoing management of weeds may be minimised. Club root could pose a risk if a brassica crop is established in a field in consecutive years. A 5-year rotation is a good way to rest the soil to help avoid club root issues.

FERTILISER

Fertiliser needs depend on specific crop and soil available nutrients. Guidance can be provided by ADAS on crop needs as well as using your soil tests and previous cropping history to help guide your fertiliser applications.

FEEDING

Research has shown that brassicas are on par with high quality conserved forage but below that of concentrates and cereals. It is important to remember that forage crops are usually high in carbohydrates and low in fibre which means farms should try to provide fibrous additional feed like hay or straw (consider doing this before grazing commences to reduce travelling on ground with heavy machinery). This will hopefully help prevent acidosis or bloat.

The AHDB provide this useful forage crop guidance table

	Sowing rate (t/ha)	Days to grazing	Number of grazings possible	Summer/winter use	Dry matter %	Digestibility (D-Value)	ME (MJ/kg DM)	CP (% DM)	% Utilisation	Average DM yield (t/ha)	Growing Cost (£/ha ²)
Swedes ¹	1.00	170-250	1	Winter	11-13	87	12-13	10-11	80	8,000	482
Kale ²	6.25	150-220	1	Both	15-17	80	10-11	14-17	80	9,000	465
Stubble turnips ²	5.00	60-100	1	Both	12-15	85	10-11	17-18	80	6,000	319
Grazing turnips ³	5.00	60-100	2+	Both	12-15	75	10-11	17-18	75	3,000 (1,000 regrowth)	487
Rape/kale hybrid ²	6.25	90-110	2*	Winter	12-15	80	10-11	18-19	80	6,000	313
Forage rape ²	6.25	90-110	2	Both	10-12	80	10-11	19-20	80	4,800	244

ALTERNATIVE BEDDING SOLUTIONS

We have begun thinking about alternative bedding solutions to potentially replace straw. This is so we can be prepared if it becomes unavailable or uneconomical to use later in the season. Possible alternative bedding materials are woodchip, wood shavings and sawdust. Some guidance also lists peat and reeds as alternative bedding but these may not be available to all farmers. Taking woodchip as the example, it can be composted and spread directly to land after it has been used as bedding.

Woodchip has also been reported to have greater absorbency qualities when compared to straw. Ideally woodchip will be between 70-80% dry matter. Young stock (6 months and below) should take priority with straw and alternative solutions utilised for breeding and fattening stock. ADAS' advice is to have a long-term plan on what alternative bedding may be available, get ahead of the ball and plan for it now and consider the management of your alternative bedding solution once it has been used.

Longer term alternative bedding solutions are available, sand, mattresses and slats can offer a replacement and reduce the need for straw. However, this would take a long-term strategy, and have financial implications, but could alleviate the current risk that is faced following a wet winter and potential straw shortages.

If you would like to discuss this with ADAS we can offer 1-1 consultancy on this topic and many more.

NEXT EVENT

Thursday 23rd May at 6pm – The Challenging Wet Spring and it's impact now and going forward – Location - Ballaquinnea Beg, Lhergy Cripperty, Union Mills, Isle of Man. IM4 2AH – food and drink provided – By kind permission of Daniel and Alice.