Factsheet 15: Grazing Management

Overview

Improved grazing management is one of the most effective strategies livestock farmers can use to improve their operations. The benefits of better grazing management are many - improved profitability,increased yield and quality of pasture, reduced reliance on inputs (feed and fertiliser), improved soil health, improved animal health and all round animal performance, ecosystem services such as better nutrient cycling, extended grazing season and increased biodiversity. A well managed grazing platform will also provide higher resilience to extremes of wet and hot/dry weather that are becoming increasingly common.

There is potentially a £1.25 per day saving on cattle being at grass rather than being housed

	Housed	At grass	Saving
15 kg/day of dry matter*	£1.80	£0.90	**£0.90**
Straw bedding	£0.15	£0.00	**£0.15**
Machinery use	£0.10	£0.00	**£0.10**
Total	£2.05	£0.90	**£1.25**

**Cost based on 12p/kg DM silage and 6p/kg DM for grass*

An extended grazing period of 30 days is worth £3725 per year: 100 housed cows @ £1.25 for 30 days = £3725 saving

Infographic courtesy of: AHDB Knowledge Library - Rotational Grazing Systems for Cattle - https://ahdb.org.uk/knowledge-library/rotational-grazing-systems-for-cattle

Which grazing system?

There are many different interpretations of the ideal grazing system, from rotational grazing to adaptive multi-paddock grazing, but they all have 2 principles in common -

1. Regular movement of animals to prevent overgrazing
2. Rest periods between grazings to allow plants to recover

As graziers, allowing plants to rest and recover is one of the most powerful tools we have, especially in our mild, wet climate that is perfect for growing forage. Adequate rest periods allow us to maximise both yield and quality of our pastures.

How to do it

Getting started with better grazing management can be daunting, with the initial work in setting the system up often putting people off. Getting the infrastructure right is very important and this mostly involves investment in both water and fencing.

Starting small and splitting your paddocks in half and moving your animals twice as often will have an immediate impact and as you improve infrastructure and the way you work, you can increase the number of paddocks you have and the frequency of animal moves.

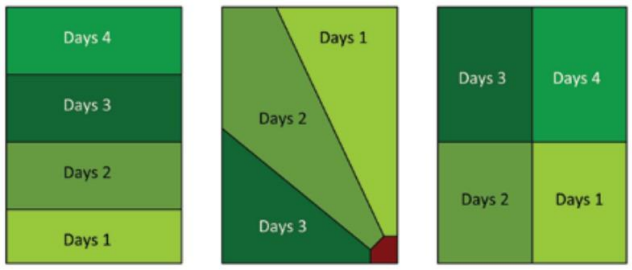
"The best investment you can make on your farm comes on a reel - water pipe and electric fence wire"

Angus Dalton, Dalton's Dairy

How you split your paddocks will be determined by the available water and infrastructure. Again there is no right or wrong answer here, work to the resources you have available to you and the two principles of good grazing, moving your animals and resting your pasture.

Rest periods will vary throughout the year and so will the number of paddocks you need to allow for adequate recovery. In the summer you will need fewer paddocks and can shut up ground to cut for forage, as autumn arrives the number of paddocks needed will increase as grass growth slows.

Examples of how to split paddocks



Infographic courtesy of: TEAGSAC Grazing Guide book - https://www.teagasc.ie/media/website/crops/grassland/Grazing-Guide-Book-2011_0-21.pdf

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To measure or not?

A key part of good grazing management is measuring your available forage in order to understand if you have enough to meet the demand from your animals. Knowing the kilos of dry matter per hectare means you will have a good idea of how long stock will have to graze each paddock.

Measuring does not have to be either complicated or expensive but it is an additional labour requirement that should be factored in when planning a grazing strategy.

The simplest tool for measuring grass is a free sward stick from AHDB, with plate meters being a step up from this. Mounted and trailed options are available.

Rising plate meter

The most important aspect of measuring grass is to be consistent. Weekly measuring should be considered during peak growing periods.

STOCK	ENTRY Dry Matter/Height	EXIT Dry Matter/Height
	kg per Ha / cm	kg per Ha / cm
Ewes and lambs	2-2500 / 8	1500 / 4-5
Lambs finishing	2-2500 / 8	1500 / 4-5
Cows and calves	3-3500 / 10-15	1500 / 4-5
Growing/ finishing cattle	3000 / 10	1500 / 4-5

Sward dry matter/height targets for cattle and sheep

Grazing for carbon

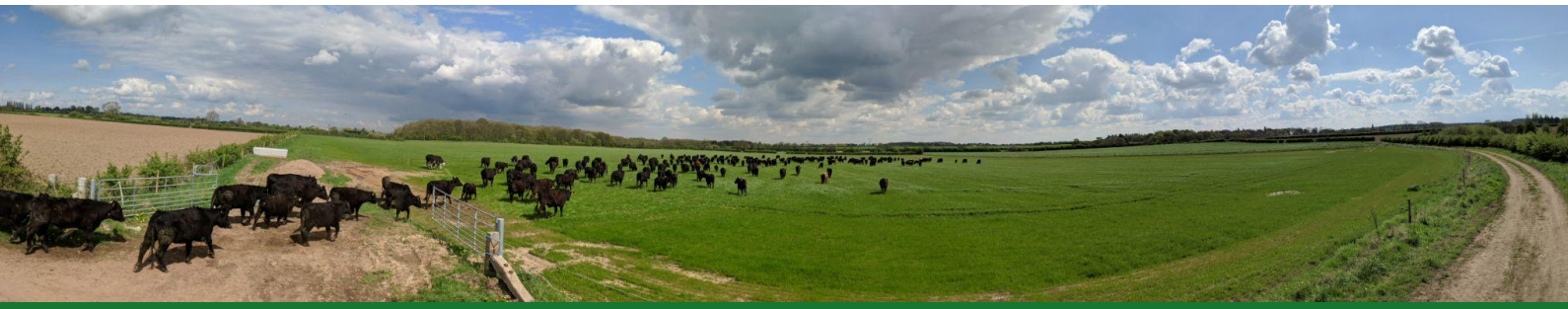
Good grazing management can also have a positive effect on your on-farm carbon emissions. Increased quantity, quality and utilisation of pasture will reduce the amount of bought-in feed and fertiliser required, with associated emissions reductions.

Strategy	Annual yield (t DM/ha)	Utilisation (%)	Useable yield (t DM/ha)	Percentage increase (%)
Set stocking	6.0	50	4.3	
Continuous (variable)	8.5	60	5.1	20
Rotational	10.2	65	6.6	56
Paddock	10.2	80	8.2	92

Infographic courtesy of: AHDB Planning Grazing Strategies for Better Returns

Increasing the length of the grazing season will require less conserved forage and straw and produce less muck to spread, all of which will further reduce emissions through reductions in machinery operations.

Well managed grazing can also sequester significant amounts of carbon as organic matter (and soil health) increases. This can be as much as 40t/ha, which is the equivalent of 6Ha of tree planting

This factsheet was produced by the Farm Carbon Toolkit on behalf of Farm Net Zero, a project led by farmers in Cornwall, exploring the contribution that agriculture can make to achieving Net Zero. This project is funded by the National Lottery Community Fund.

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