

Comparing Grazing Methods

Practical Guide



Making more from grass is beneficial to the farm business and wider environment. Improve utilisation of grass grown on farm and you can reduce hard feed and fertiliser requirement - both types of inputs have environmental consequences. In addition, we must consider how grazing impacts soil carbon storage - a key element of the climate change challenge.

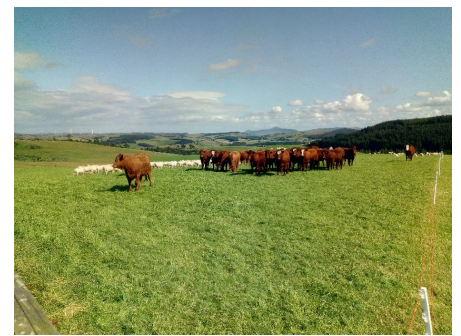
Grazing animals can be set stocked (left in a field for more than a week at a time) or rotationally grazed (moved through a series of paddocks on a regular basis). Rotational grazing can be managed with a short rest period (15-21 days through the summer) or a long rest period (60-80 days). For this factsheet, the short rest period type is termed paddock grazing and long rest period type is termed mob grazing.

Our Practical Guides cover five useful topics:

1. Use energy and fuels efficiently
2. Renewable energy
3. Lock carbon into soils and vegetation
4. Making the best use of nutrients
5. Optimise livestock management

visit www.farmingforabetterclimate.org for more information

This Practical Guide is designed to improve understanding of different grazing strategies, their impacts for farm businesses and the environment.



Grazing photos (left to right: Paddock grazing, Mob grazing (credit: Alex Brewster) and co-grazing sheep and cattle)

Grazing methods

The table below is designed to help categorise the different methods. It is a guide and is not inclusive of all the variations in practice.

	Grazing interval	Rest period*	Grass height targets		Grass utilisation
			Entry	Exit	
Set stocking	over 1 week	NA	5-8cm		50%
Paddock grazing	0.5 days-1 week	15-30 days	8-10cm	5cm	65-80%
Mob grazing	0.5 days-1 week	60-80 days	30-60cm	10-20cm	50%

* Guide during the growing season, this should be flexible according to the growing conditions.

This practical guide is part of a series looking at steps you can consider to reduce emissions whilst maintaining a profitable farm business. For more information, tips and ideas and to read what other farmers have done, visit www.farmingforabetterclimate.org. Find us on [Facebook](#) and follow us on [Twitter](#) @SACFarm4Climate.



Scottish Government
Riaghaltas na h-Alba
gov.scot



Comparing grazing strategies

Set Stocking

Set stocking is the most common approach to grazing in Scotland. This is where the stock are left to graze a field for more than a week at a time, often months. Grazing livestock are selective, they will find the grass plants with the greatest energy levels and favour them. This can lead to patchy over grazing in some areas and build up of reject areas too. As a result, the productive species are disadvantaged compared with the lower energy species.

Pros	Cons
<ul style="list-style-type: none"> Easy management Livestock more settled Applicable to challenging terrain Better for biodiversity? 	<ul style="list-style-type: none"> Less pasture production Inefficient use of pasture Potential for areas of overgrazing

Paddock Grazing

Paddock grazing is rising in popularity with availability of improved fencing and water infrastructure products. Under paddock grazing, the livestock are given less choice. As a result the grazing is more even across the field and productive species are grazed in a way that favours their persistency.

Pros	Cons
<ul style="list-style-type: none"> Greater pasture productivity Grass quality maintained for longer Better persistence of sown species Greater stocking rate potential Easier stock surveillance Reduced concentrates and fertiliser More even dung distribution 	<ul style="list-style-type: none"> Water and fencing required Requires planning and flexibility Less sward diversity?

Mob Grazing

Mob grazing seeks to take a longer term perspective. Mob graziers are focused on the soil health. A large proportion of the tall grass that the livestock meet on entry to a field is trampled into the ground. In addition, allowing the grass plant to achieve it's full reproductive cycle will lead to greater rooting depth. This is all to improve the soil health. Some farmers have found grazing in this way has enabled them to outwinter without damaging the soil structure.

Pros	Cons
<ul style="list-style-type: none"> Less issues with parasitic worms Greater sward diversity Better soil health? Longer grazing season Stock surveillance easier Reduced concentrates and fertiliser 	<ul style="list-style-type: none"> Lower stocking rate than paddock grazing Water and fencing required Requires careful planning Plan must be flexible

Soil Carbon

Grassland soils contain more carbon than arable soils. Carbon removal from the atmosphere and storage in the soil (termed carbon sequestration) could help to mitigate climate change. Soil carbon is also beneficial to water management in both dry and wet years and is valuable to good soil health generally.

Overgrazing and soil disturbances leads to soil carbon loss via soil erosion and atmospheric loss. As livestock graziers, the first objective should be to protect the soil carbon by minimising poaching and cultivation.

Some theories suggest mob grazing leads to better soil carbon storage than other forms of grazing. Increasing grass productivity generally increases carbon formation in the roots.



Carbon footprinting

A carbon footprint quantifies net greenhouse gas emissions across the business. [Agrecalc](#) is a free to use carbon footprinting tool which accounts for the farm emissions and soil sequestration to calculate farm carbon footprints. It can also help you compare your carbon performance against like farm businesses.