

tips & tools

FEEDBASE AND PASTURES



Get the best out of set stocking

Set stocked paddocks are grazed for an extended period (a few months to a full year). Properly managed, set stocking is not a 'set and forget' system – it is a planned and monitored method of animal production. Set stocking a paddock even for a limited period provides the only reliable guide to determining paddock and animal performance.

Seasonal tactics

In a set stocking system, the following tactics can be applied at each change of season.

After the autumn break

Ensure that pastures have been grazed to around 1,000kg DM/ha over summer so that dry herbage does not reduce clover germination.

Defer grazing if stocking rates are near to carrying capacity. Although this is not strictly set stocking, if stock are off paddocks until pasture grows the winter feed supply will increase. Merge similar mobs or classes of stock, and supplementary feed until growing pastures reach the target grazing levels (500kg+ DM/ha for wethers and 800kg+ DM/ha for spring-lambing ewes).

Annual pasture utilisation can be assessed from the amount of dry pasture residue remaining from the previous spring. As a guide, aim for <10% of total dry matter.

Winter

Winter feed availability is the main determinant of farming stocking rate.

Monitor stock and pasture availability regularly to prevent widespread overgrazing of plants and fluctuations in animal growth due to variations in pasture quantity and quality. Aim for:

- Condition score 3 for ewes and C.S 2 for wethers
- Pastures maintained at around 800–1,000kg DM/ha in ewe paddocks, and 500kg DM/ha in wether paddocks

At the end of winter, review the paddock allocations and

Key benefits

- Using planned set stocking and management principles can improve your pasture and animal production.
- Varying your set stocking strategy between seasons can assist in managing grazing pressure effectively.

record how each paddock performed, including any tactics that could improve grazing management.

Spring

Maintain even grazing pressure across all grazed paddocks during rapid pasture growth, providing some capacity to delay seed set and maximise leaf growth if stocking rate is relatively high. Stock can selectively graze the seed heads of some grasses.

Set stocking allows stock to select a high quality diet when feed is in excess but a low stocking rate is likely to cause 'patch' grazing from some plants being under grazed while others are overgrazed.

Summer/early autumn

Paddocks should be grazed according to livestock requirements. Set stocking may continue or tactical grazing may be more appropriate.

Utilise dry standing pasture residues by grazing down to 1,000–1,200kg DM/ha by the autumn break to increase clover germination. Lambing paddocks may need 'crash' grazing with a large mob to prepare them for autumn.

Protect perennial species during droughts through supplementary feeding and sacrifice paddocks (paddocks containing low value or degraded pastures used to save priority paddocks from overgrazing). Assess bare ground against ground cover targets in late summer so that the previous stocking rates can be adjusted. Bare ground should be less than 30% to reduce the risk of weed invasion and erosion.

Planning set stocking

Determine total stock numbers – stocking rate is a key profit driver and influences the success of all grazing management systems.

Property/paddock evaluation – rate paddocks according to various criteria: pasture composition, fertiliser history and previous livestock performance.

Stocking rate – match paddock stocking-rates with livestock requirements and pasture supply, maintaining the long-term paddock carrying capacity. Getting this right will prevent over or undergrazing and maintain the productivity and sustainability of the system.

Annual feed budgeting – allows stocking rate to be initially set, based on historic pasture growth rates. Feed supply should be monitored, along with pasture availability and stock fat score, allowing stocking rate to be adjusted or mobs moved to more appropriate paddocks.

Identify special purpose paddocks – ewes require sheltered lambing paddocks; weaner paddocks need to be 'clean' of worm larvae. Plan lambing and weaning areas in the autumn.

Management tips

Regular monitoring – vital during periods of slow pasture growth when it may be necessary to change management tactics to ensure animal and pasture production goals are not sacrificed. Late winter is a good time to review overall stock and paddock condition and annual records of this assessment is the basis of better decisions in the future.

Paddock size – there is no right size for paddocks. Smaller paddocks generally promote better pasture utilisation but this benefit must be balanced with the need for practical mob sizes. Increasing mob/herd size can deliver a similar benefit to having smaller paddocks.

Combined grazing systems – tactical grazing involving a combination of set stocking and rotational grazing offers benefits, particularly at higher stocking rates and when pasture persistence is threatened in low rainfall seasons.

Grazing method fact

Advantages

With set stocking, animals will select a high quality diet provided clover content is high and feed is not limited. Under these situations, set stocking is often the best grazing method for short-term finishing or weaner growth rates when the grazing objective is to grow and finish livestock for a target market.

Other advantages include:

- Different classes of stock/mobs can be allocated to the most appropriate paddock
- Lamb loss from mismothering is minimised
- Animal disease outbreaks are more confined
- Breeding programs often require smaller mobs where progeny can be accurately identified (single sire mating groups)
- Individual paddock performance can be assessed, with animal production directly attributed to a single paddock
- Pasture is kept shorter compared to rotational grazing, for a given stocking rate
- Lower infrastructure costs (fencing and water points)
- Labour efficiency due to limited stock movements, but more mobs are spread over the farm

Disadvantages

With set stocking, animals determine the areas of the paddock they graze and those they avoid. In effect they are in charge of the grazing process. At sustainable stocking rates, the area grazed daily represents around 5% of the total paddock area, often leading to overgrazed patches, rank areas and the formation of stock camps.

Animals are highly selective in their diet, especially at the break of season and after summer rain, when they rapidly eat new green leaves. The potential for permanent damage to the pasture is another disadvantage of set stocking, especially for perennial grasses.

Other disadvantages include:

- Lower pasture growth rates, particularly in autumn/winter when pasture is often kept low and leaf area is not sufficient to maximise photosynthesis for plant growth
- Undergrazing in high-growth seasons leading to the possibility of rank pastures
- The decline of perennial pastures, particularly in low or variable rainfall periods
- Reduced pasture quality due to understocking, making appropriate stocking rates essential

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Further information

For further assistance, contact your local pasture or livestock advisor or go to www.mla.com.au/publications to search for other MLA publications on grazing and pasture management.



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