

tips & tools

FEEDBASE AND PASTURES



Tactical grazing to maximise pasture and animal productivity

Tactical grazing is a flexible approach to grazing management and uses a range of 'grazing methods' throughout the year.

Key tactical grazing steps

A number of steps should be followed:

1. Determine grazing management objectives for each paddock and/or flock or herd
2. Select the grazing tactic to match each planned objective
3. Decide when and for how long to apply the tactic
4. As objectives change, the grazing method changes

Grazing objectives

Specific objectives can be targeted using a tactical grazing system. These may include:

Increase pasture utilisation

Improving the level of utilisation of feed grown is fundamental to increasing stocking rates and productivity.

To increase pasture utilisation, implement a tactical rotational grazing system with stock movement based on either time or pasture growth. Rotational grazing can be applied year-round to prevent selective or patch grazing and stock camps, or can be ceased when animal performance and growth is inhibited/diminished (lambing or finishing stock for market).

Increase pasture growth

Up to 20% increase in pasture growth can be achieved by using rotational grazing, especially one based on plant growth criteria (such as kilograms DM/ha available, pasture height, leaf stage of perennial grasses).

Apply rotational grazing all year round for perennials, or for a long-term impact on pasture composition. Alternatively, rotational grazing could be applied

Key benefits

- Determining how to apply tactical grazing can achieve specific grazing objectives.
- Using tactical grazing tools can achieve improved pasture and animal productivity.

seasonally to increase pasture growth rates. Rotational grazing to accumulate leaf area, for example, may increase autumn/winter growth.

Control livestock intake

To control livestock intake tactical rotational grazing based on animal intake (kg DM/head/day) can be implemented for the specific period when livestock intake needs to be regulated. This may be all year for precision grazing operations such as growing bull beef, or seasonally, such as rationing feed for ewes early in pregnancy to save feed for late pregnancy or lambing.

Specific livestock management

Use set stocking for flock management, such as lambing and single sire joining, or health management such as controlling footrot or the spread of ovine Johne's disease.

Choose a combination of set stocking and rotational grazing to finish livestock for market, depending on targets and requirements.

Improve pasture composition

To increase perennial grass content and reduce broadleaf weeds use time or plant growth based tactical rotational grazing. To achieve this, use all-year-round rotational grazing to increase the density and vigour of perennial plants. Perennials have particular times, at establishment or reproduction, when rest and re-growth is required for long-term benefit to pasture composition and root growth.

Increase sub clover content by using set stocking or rotational grazing with short rest periods

Apply higher grazing pressure in late winter/early spring – the critical time to boost sub-clover content of the pasture; or speeding up the grazing rotation (shorten the rest period) in autumn and winter. This will prevent shading of the prostrate growing clover if annual or perennial grasses are too dominant. Take care not to increase broadleaf weeds.

Maximise pasture quality (late spring/summer)

To maximise pasture quality use a combination of grazing strategies and fodder conservation to manage the spring feed surplus to prevent build-up of pasture, before rapid plant senescence. Prioritise paddocks for extra spring grazing pressure. If grazing the whole property appropriately in a normal spring is not practical, forego feed quality in some paddocks for standing summer feed. Weed infested paddocks can benefit from greater grazing pressure or cutting for silage/hay, before seed heads of annual grasses mature.

If rotationally grazing, the spring rotations should be fast (short rest periods) to prevent pastures maturing too early and to allow stock to select the best quality feed. This can also help keep perennial grasses actively growing and extend their growing season.

Improve the persistence of perennials

Perennial grasses use the rest period between grazing to build root reserves essential for growth and persistence. To improve their persistence, rest all year for a large impact on pasture composition and improved root growth. Most perennials can survive periods of set stocking when other production objectives need to be met.

Alternatively, target rest at critical periods, especially for long-term survival of more vulnerable pasture species. Or, plan longer summer rest periods, particularly in drier areas and for low drought-tolerant species such as cocksfoot and ryegrass.

Rest at critical times is important for species that rely on seedling recruitment (such as short-duration perennials and some native grasses such as wallaby grass) and should be applied during flowering and seed set (up to six weeks from stem elongation), as well as during germination (up to six weeks).

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.

To improve environmental sustainability

A tactical rotational grazing system based on time or plant growth criteria to maximise perennial content, enhance water use and achieve groundcover goals, will contribute to the environmental sustainability of a grazing system.

A rotational system can be applied all year to increase perennial grass content, prevent selective or patch grazing, camping effects and the development of stock tracks or bare areas, or for higher risk land classes. The sustainability of most rotational grazing systems is not compromised by occasional set stocking to meet other production objectives.

Increase animal performance

To increase animal performance, stock must be grazing on high quality pasture. This can be achieved by:

Set stocking

Allowing animals to select the highest quality diet from the available forage gives the best per animal performance. Clover content often increases under this management and faster weight gains per head can result, providing feed availability does not limit animal intake. It is important to note that set stocking does not give optimum performance per hectare and can lead to increased bare ground over summer/autumn when clover and annual grass content is 50% or more.

When targeting animal performance, set stocking should be applied for short periods – such as at lambing, and finishing livestock to market specifications. Pasture composition and sustainability objectives will usually not be compromised by short periods of set stocking.

Rotational grazing

Production is maximised when pastures are managed to maintain moderate levels of clover, and grazing management keeps pastures in the growth phase for as long as possible.

Acknowledgments

Lisa Warn, formerly Department of Primary Industry Victoria, Seymour; now Mackinnon Project, University of Melbourne; Kathy Junor, technical editor



Level 1, 165 Walker Street
North Sydney NSW 2060
Ph: 02 9463 9333
Fax: 02 9463 9393
www.mla.com.au