Grazing Systems

Simple time based rotational grazing:

Simple four-paddock rotations can achieve many of the benefits of more intensive grazing methods where stock are moved frequently (every 1–3 days) through a large number of paddocks (up to 20 or 30). There is often a major impact on pasture production, particularly of the perennial grasses. Stocking rate increases of up to 20% are possible after switching from set stocking to rotational grazing.

Rotational grazing helps reduce 'patch' grazing and livestock camps, minimises broadleaf weed content, decreases the proportion of annual grasses and improves ground cover over summer / autumn.

The inspection of stock during regular movements often results in better animal husbandry and management.

The amount of plant regrowth depends on how hard plants are grazed and the rest period, with six weeks generally being adequate.

Rotational grazing generally results in less sub-clover content and, over time, greater grass dominance. However, set stocking can be tactically employed in rotational grazing systems to build pasture clover content. This is only recommended after a good autumn.

Either animal or pasture performance can be manipulated with rotational grazing. Where animal performance is critical, plan graze periods of one day. For best pasture performance, plan graze periods of no longer than three days to avoid re-grazing or damage to new tillers.

Rotational grazing is best when pasture cover and growth rates are low (winter), as the increase in leaf area enables the pasture to capture sunlight and grow more feed.

Weeds
Increased grazing pressure (larger mobs on smaller areas) gives less desirable plants more chance of being grazed or trampled. Weeds can be managed by reducing germination and seed set. Competition from desirable species is also encouraged.

Measure and monitor
When livestock are moved, monitor pasture to estimate the remaining feed on offer. This provides an indication of the degree of under or overgrazing.

Overgrazing
When stock overgraze a paddock, they damage the pasture base. If there is not sufficient rest period for regrowth between grazing, total pasture production can be seriously reduced. Rest periods should be at least three weeks for rapidly growing pasture, and six weeks at other times. Have a management plan to cover late autumn breaks, wet, cold winters, dry springs and drought and develop skills in feed budgeting.

SUMMARY- A rotational grazing system can improve pasture production, utilisation and persistence. Moving stock around a small number of paddocks, grazing each for a fixed time, is an easy way to get started.

Intensive rotational grazing:

In general, rotational grazing favours perennial species; continuous grazing favours annual species, including clovers.

Rotational grazing generally provides a less consistent animal intake than set stocking. This can reduce the performance of individual young animals. Intake is highest when the stock first enter each new paddock. Selective grazing is dramatically reduced under intensive rotational grazing systems.

There are three types of rotational grazing, based on stock movement decisions:

- *Time (calendar)* – uses fixed time intervals for stock movement. The number of paddocks usually dictates the grazing and rest periods.

- *Plant growth* – aims to keep pastures in the most active growth stage by manipulating graze and rest times based on the feed on offer.

- *Animal intake* **–** provides a calculated amount of feed per animal per day. Pasture feed on offer can be either 'rationed' over periods of restricted pasture growth, or maximised to enable optimal livestock performance.

Number of paddocks
In principle, the more paddocks the better – the grazing period becomes shorter and more intensive, while the rest period can be longer, improving management flexibility. In general, the more paddocks, the higher the stock density. While this can be beneficial for pasture, the potential for overgrazing may be greater, particularly when plant growth is slow.

Grazing large mobs on small areas promotes more even grazing and reduces selective grazing, stock tracks and camps.

Overgrazing
Overgrazing occurs when perennial plants are grazed while using stored energy to grow, resulting in plants that are unable to grow to their potential and will not persist, especially when moisture stressed.

Overgrazing can occur in two ways:

- **Graze period too long –** when animals are allowed to graze re-growing plant leaves within three days during fast growth periods.

- **Rest period too short –** when plants are not allowed to recover fully from the previous grazing before leaves are eaten and stored energy reserves are replenished.

SUMMARY- Intensive rotational grazing systems involve livestock being moved frequently through a large number of paddocks, based on either a fixed time rotation or pasture growth.

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