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PROVINCE OF KWAZULU-NATAL

PASTURES IN KWAZULU-NATAL

Pasture Utilisation

GRAZING SYSTEMS

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INTRODUCTION

The extremes of grazing systems range from continuous grazing (one camp per herd for the season) through two, four, six or eight rotationally grazed camps, to strip grazing (where the animals may be given a new strip of pasture every half hour).

There are many arguments for and against the different grazing systems for cultivated pastures. It is not the intention here to identify which is the "best" system. There is no one system that is "best" for all situations. Different pasture species are adapted to and best suited to different utilisation regimes. Each farmer has his own level of expertise and there is often competition between enterprises for managerial time and available finances. Each system has its place.

It is the intention in this article to list the advantages and disadvantages of continuous and rotational grazing systems: strip grazing is regarded as a refinement of rotational grazing. Furthermore, an attempt will be made to indicate under what situations the different grazing systems could be applied.

CONTINUOUS GRAZING

With continuous grazing the animals are placed in a camp at the beginning of the season and remain there for the entire grazing period of each year. The number of animals may be varied during the grazing season.

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The advantages of continuous grazing include the following:

- Least management input of all the grazing systems, since the animals are placed in a camp and remain there for the growing season of the pasture.

- Least cost of all the systems with one boundary fence and possibly only one watering point.
- Least disturbance to animals since the animals do not need to be moved from one camp to another.
- Easy to keep grazing records.
- At light stocking rates good production per animal can be expected.

Disadvantages of continuous grazing include:

- The "precise" stocking rate needs to be known, otherwise it may be necessary to add animals or remove animals as the pasture growth rate varies over the season, or an area may have to be closed off.
- Seasonal fluctuations in yield are difficult to cater for (herbage cannot be rationed and it is difficult to make hay or foggage in sections).
- Herbage cannot be rationed during drought periods.
- Area selection (particularly with sheep) leads to inefficient pasture growth rates and inefficient pasture utilisation (some areas are defoliated severely and repeatedly while other areas may be rejected and become moribund).
- Application of fertiliser, particularly nitrogen, can cause distinct poisoning problems, both from the high nitrate content in the herbage following fertilisation and from fertiliser lumps and spills during application.
- Since the animals are not moved from camp to camp, continuous grazing tends to lead to complacency and the animals often are not "seen" for extended periods, with the result that sick animals or animals in poor condition often are noticed only after the "poor" condition has become so severe that it has affected profitability.
- Supervision of licks and water points is often neglected.

ROTATIONAL GRAZING

With rotational grazing there are a number of camps for each group of animals. The group of animals is moved from one camp to another, thus allowing a period of absence from each pasture area after it has been grazed.

Advantages ascribed to rotational grazing include:

- Uniform areas (soil, slope) are camped separately so that areas with different production potentials can be treated separately to maximise production.
- Efficient utilisation of the pasture is possible because varying periods of stay or different sized camps can be used to attain the required degree of utilisation, or leader and follower herds can be used.

- Herbage of the desired quality (age of regrowth) can be offered to animals by adjusting the number of camps or the period of regrowth following utilisation.
- During periods of drought or slow growth of the pasture, herbage can be rationed to the animals.
- Excess growth can be used for hay, silage or set aside for foggage.
- It is easy to control the degree of defoliation to ensure that the pastures are maintained at high growth rates.
- The adverse effects that may result from applying nitrogen (high nitrate nitrogen in the herbage or spilling of fertilisers) can be reduced.
- With irrigated pastures the adverse effects of puddling and footrot can be reduced by irrigating once the animals are removed from a camp.
- There is regular "informal inspection" of animals as they are moved from one camp to another and "unhealthy" animals can be spotted easily.
- Lick troughs are usually moved with the animals and shortages are easily noticed.

The disadvantages of rotational grazing include:

- Increased fencing and watering costs.
- Increased managerial time required.
- Application of fertiliser, and establishment of the pasture could be a problem with small areas (well designed electric fencing can help to alleviate these problems).
- Access, to each camp, by animals and machinery could be a problem.
- Increased labour is required to move stock and lick troughs.
- Compared with continuous grazing, animals are disturbed relatively frequently.

CHOOSING THE CORRECT SYSTEM

Besides the advantages and disadvantages of rotational and continuous graz