

Summary

Good planning well in advance of the need is the key to successful pasture systems. Each system must be individualised in accordance with the particular farm enterprise.

Species and cultivars must be selected according to their likely management use (and abuse), as well as their soil and climate suitability. High country properties are commonly run as large, set stocked paddocks. This should be regarded as an accident of history rather than a desirable situation.

The need for improved grazing management through subdivision in the marginal environments of the high country is as great as, or greater than, it is elsewhere in New Zealand. When pastures are used during the growing season, grazing management must take into consideration the differences in species tolerances to grazing intensity and duration, and regrowth interval. The most marked distinction is between species that are tolerant of close grazing/set stocking, and those requiring long regrowth periods after grazing.

The farmers in the high country, like those elsewhere, have to reach a compromise between five general requirements:

- The feeding requirements of the particular type of animal they choose to farm
- The range of land classes within their particular farm boundary
- Selection of suitable fertiliser strategies
- The suitability of the different pasture species for those different land classes

- The demonstration of the sustainability of the options by persistence through time.

Temperature and moisture are characteristic of each site and cannot be changed, except for the special cases of irrigation and drainage. Thus, major changes in farm productivity depend on improvements in soil fertility and pasture management to enhance the growth, utilisation and persistence of resident and introduced pasture species, and a better appreciation of the optimum roles of different landscape units.

The future of high country farming lies increasingly with strategies of selective development and pasture utilisation, based on different combinations of introduced species and cultivars as well as resident species. The off-take from agricultural products of wool and stock, must be balanced by inputs, particularly fertiliser, to balance the vegetation and nutrient pools. Such strategies will be strongly influenced by the different combinations of slope, aspect and altitude (and therefore climate), soil type and fertility, and vegetation type, cover and location in relation to the desired stock management policy. Selective development will mean more selective fertiliser application both in quantity and type, the range again reflecting the diversity of soils and landscape units, and the role that is decided on for each to meet seasonal feed requirements in the most cost effective way.

We hope this guide will help high country runholders and farmers of other temperate mountain lands to achieve these objectives.