Agnote

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Management of Native Pastures in the Alice Springs District

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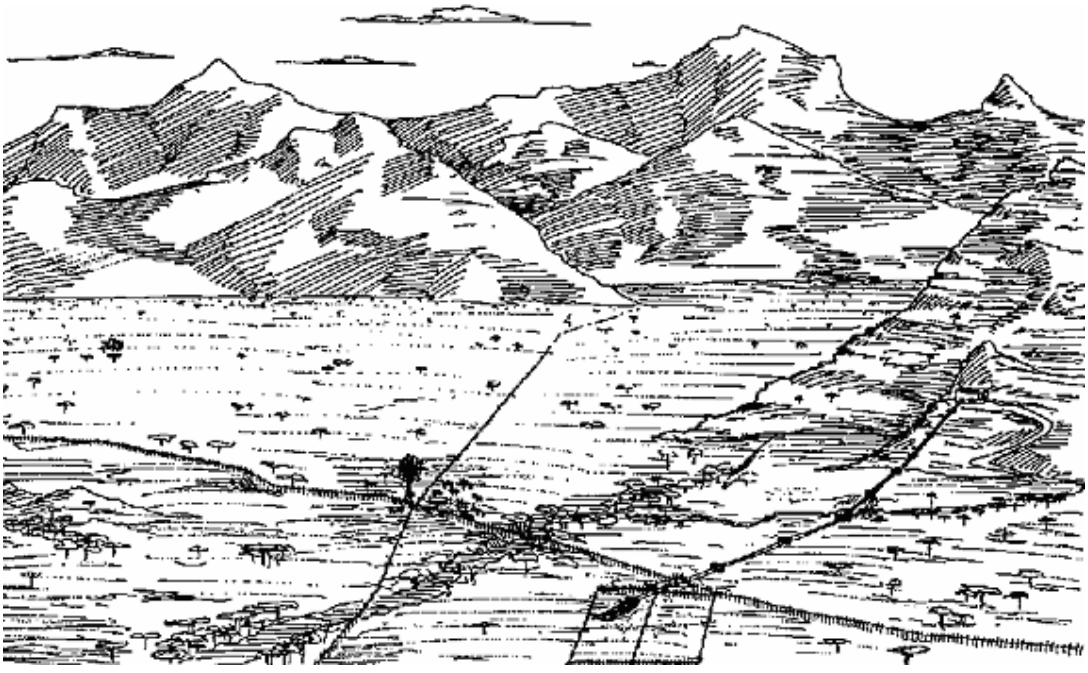
Native pastures are the basis for beef cattle production in Central Australia. It is important that these rangelands be managed wisely for continued profitability of the pastoral industry.

WHY MANAGE PASTURES?

Free ranging cattle selectively graze the most palatable species of pasture on offer. The long-term impact of this grazing can be the loss of palatable pasture species, shrub increase and erosion. These `range condition' concepts are described in Agnote G16, `Range Condition Concepts in Central Australia'. It is possible to maintain pastures in a palatable and productive state through conservative stocking rates and various grazing management strategies.



STOCKING RATE

Summer rains promote grass growth. The effectiveness of this growth season largely determines the forage supply that is available to carry cattle through the remainder of the year.

Stocking rate for good production levels (e.g. steer growth rates, branding percentages) should be set according to forage availability and quality. It can be very difficult to fine-tune stocking rates to fluctuating feed levels. A good option is to set conservative stocking rates for each management area based on feed available at the end of summer.

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This forage supply should be managed so as to carry cattle through to the next summer without further significant rain.

Utilisation levels on palatable pasture types at intermediate distance (2-3 km) from water are a guide to remaining feed levels. Steps should be taken to shift cattle when the majority of palatable grasses within this region have been grazed.

FENCING ACCORDING TO TYPE OF COUNTRY

Most stations in Central Australia have an array of land types ranging from highly preferred floodouts and sweet country (e.g. open woodland, calcareous shrubby grassland) to inferior country (thick mulga, spinifex sandplain, ranges). Fencing is generally required to hold cattle on areas of harder country.

Cattle make their fastest growth on the more preferred pasture types or those areas with better soil types. These areas are best suited to fattening steers and bullocks, growing out weaners and putting condition on cull cattle including spayed cows prior to slaughter.

Secondary country is generally suitable for breeding. Nutritional supplements will often be required to correct phosphorus deficiency ("pegleg") and increase branding percentages.

Care should be taken when fencing country so that manageable areas of preferred country are excluded from paddocks that otherwise contain extensive areas of "hard" country. Such areas can become the focus of intense grazing pressure and quickly decline in productivity.

SUMMER SPELLING

The periodic destocking of some areas over summer enables full pasture growth to be realised. Palatable perennials (e.g. curly windmill grass (*Enteropogon acicularis*), umbrella grass (*Digitaria coenicola*), Mitchell grass (*Astrebla* sp.)) improve in vigour whilst palatable annuals, e.g. oat grass (*Enneopogon* sp.) increase and seed freely.

PADDOCK SUBDIVISION

A good way of achieving pasture spelling is to fence large areas of similar country into two or more smaller paddocks. These paddocks should be matched in area in terms of their estimated grazing capacities. Cattle can then be moved between pairs of paddocks at regular mustering intervals so that each paddock receives a period of complete destocking. This resting period should periodically cover a summer rainfall season for each paddock.

PROVISION OF ADDITIONAL WATERING POINTS

Extra watering points are probably the most effective means of more evenly dispersing grazing pressure over the whole paddock. Small dams in suitable catchments that hold water for six to eight months are effective in getting cattle away from the main bores and large dams. These small dams should be fenced and equipped with traps to facilitate mustering in wet years.

Water can be readily reticulated to different parts of the paddock with polythene pipe. Using a combination of the "lay of the land", lifting water further up the windmill tower with an extension of the mast pipe or a compensator on the windmill means that gravity can often be used to move this water, thereby avoiding engine pumping costs.

Additional waters will improve cattle production where water is taken to the feed rather than forcing cattle to graze out to feed reserves from existing watering points. This can be a particularly important drought management strategy.

Care should be used in selecting the location of new watering points. Highly erodible and sloping areas should be avoided as rapid erosion can result from the heavy grazing pressure that may be imposed around the watering point. Ideally water should be located adjacent to, rather than in the midst of highly preferred grazing areas.

BURNING

Burning areas of mature spinifex allows a softer regrowth of kerosene grass (*Aristida holathera*), various herbage species and regenerating spinifex for green pick. Small areas can be burnt whenever they will carry a fire. Large areas of spinifex should be broken up with a mosaic of many small burns greatly reducing the risk of extensive wildfires. The resultant regrowth can lift the grazing capacity of this sort of country from virtually nothing to perhaps a beast per square kilometre. (For more detail see Technote No. 86, 'Spinifex Communities and Management for Pastoral Production in Central Australia'.)

‘Cool' fires in high rainfall years can be used to remove dry rank pasture and encourage the regrowth of more nutritious green grasses and herbage - provided sufficient soil moisture is available to produce regrowth. Hot fires should be avoided as they suppress grasses and encourage generally unpalatable herbage. Fire is a useful tool for controlling woody weed encroachment.

DROUGHT MANAGEMENT

Droughts occur when there has been insufficient summer rainfall to grow adequate pasture to carry cattle through to the next summer.

Erodible and "soft" country should be protected by light stocking during droughts. These areas grow palatable perennial grasses and it is important that these grasses be preserved. Scattered storms generally fall at some stage during a drought and perennial grass areas respond much more quickly with feed than bare soil country, providing subsequent valuable grazing. Maintenance of pasture cover also minimises the erosion which can occur in the heavy storms that often herald the breaking of a drought.

Appropriate grazing management decisions in the early stages of a drought may include:

- Reducing cattle numbers on soft country by selling or agistment.
- Starting bores in drought relief country.
- Supplying water to areas of dry feed which are remote from existing waters - either by sinking new bores or reticulating water from existing bores.
- Supplying a nutritional supplement to cattle on dry feed.

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