



## Wet season spelling for improving land condition in the Victoria River District

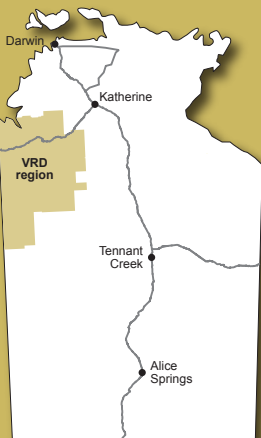
### Do I have a problem?

Continuous grazing year after year puts a lot of pressure on the preferred grasses and they can be lost from paddocks. This decline can be made worse by failed wet seasons and frequent or intense fires. The signs of deteriorating land condition are:

- large overgrazed patches and bare areas
- preferred grasses are sparse and heavily chewed
- less palatable species are increasing
- erosion

Poor land condition increases the risk of feed shortages towards the end of the dry season. Wet season spelling can halt this decline in feed quantity and quality and restore pastures to a more productive state.

*Continuous grazing can lead to the development of bare patches and a loss of pasture production*



- *Do I have a problem?*
- *How does spelling work?*
- *When to spell and for how long?*
- *When can I restock the paddock?*





## How does spelling work?

To improve the bulk and composition of pastures, spelling needs to occur during periods of active pasture growth (the wet season). The early part of the wet season is the most critical time to spell. Tussock grasses are very vulnerable to grazing in the first 6-8 weeks of the growing season because they have to use up some of their root reserves to produce green leaf.

If tussock grasses are grazed early and often in the growing season (like the grass on the right of the photo below), they have to use up more and more of their root reserves to survive. This increases the chance that they will be pulled out or die. Grasses that are ungrazed for the first few weeks of the growing season are healthier, stronger and produce more bulk.

“Just like a ute  
or a road train,  
pastures need some  
regular repair and  
maintenance to  
keep them running  
at their best”



*Grasses grazed early and often in the wet season produce less bulk and are at higher risk of death. Photo courtesy Ecograzing project.*





## When to spell and for how long?

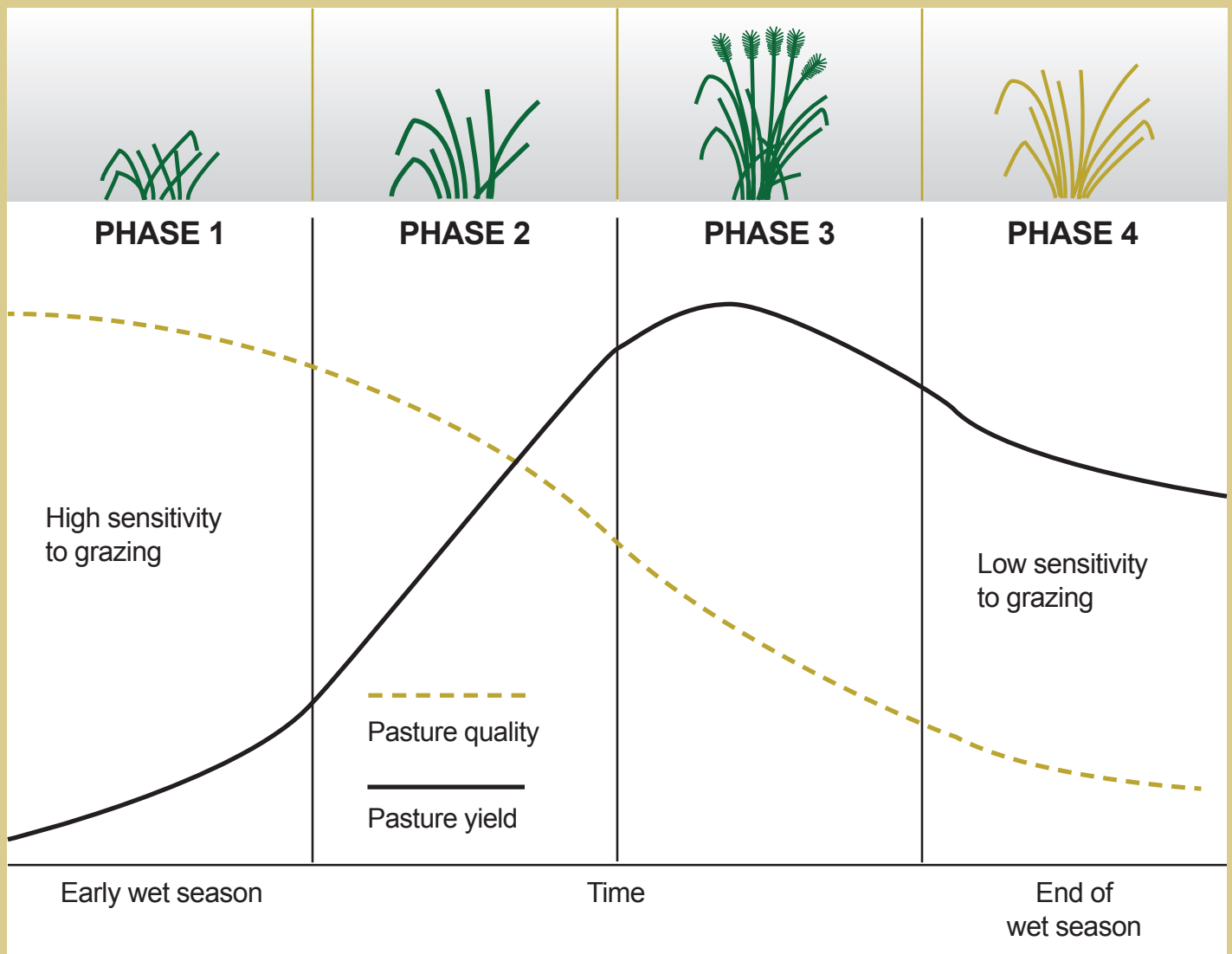
If the goal is to improve land condition, then spelling for the whole wet season is recommended. This gives the palatable plants a chance to rebuild their root reserves for next year and also set seed. It also allows new seedlings to get established without being grazed off.

A practical way to achieve a full wet season spell is to remove cattle at the second round muster and only restock the paddock at first round the following year. If access isn't a problem, you can keep the cattle in the paddock until the start of the wet season, but they should be removed once the first decent rains have fallen (i.e. 50mm in 2-3 days).

The speed of land condition recovery can be increased by spelling for two consecutive wet seasons.

“The most critical time to spell perennial grasses is the first six to eight weeks of the growing season”

## Four phases of pasture growth





For more advice on wet season spelling, carrying capacity or feed budgeting, please contact the Pastoral Production team at Katherine on 8973 9739 or Berrimah Farm on 8999 2011

Current DoR research on wet season spelling in the VRD is co-funded by the Australian Government's Climate Change Research Program as part of the Northern Grazing Systems project

## When can I restock the paddock?

- If the goal is to increase the bulk of feed, then cattle can be reintroduced once the majority of the grasses have achieved their maximum growth and have begun to flower (i.e. about half way through the wet season).
- If the aim is to improve the health of perennial plants, increase the seed bank and allow new seedlings to establish, then cattle should be kept out of the paddock until the dry season.
- Some producers will keep cattle out for the dry season and spell again the following wet if a big improvement in land condition is the goal.

## Don't let high stocking rates undo your spelling!

Obviously the cattle from the spelled paddock need to go somewhere. If these cattle are not being sold, room has to be found for them in other paddocks. There is a risk of overgrazing these "loaded up" paddocks, which defeats the purpose of spelling. To minimise this risk, it is recommended that the cattle are put into paddocks that genuinely have spare grazing capacity and/or contain resilient and productive land types.

