

# Land condition in the Fitzroy Woodlands

Forest country

## A CONDITION (GOOD)

HAS THE FOLLOWING CHARACTERISTICS:

- Good pasture growth and response to rain
- Rated at 100% of the long-term carrying capacity
- No weed infestations
- No erosion
- Good soil surface condition
- Generally good ground cover (more than 70% at the end of the dry season)



## B CONDITION (FAIR)

HAS THE FOLLOWING CHARACTERISTICS:

- Pasture with a mix of less-favourable or annual plants
- Pasture growth and response to rain reduced by 25%
- Rated at 75-80% of the long-term carrying capacity
- May have some weeds
- May have some signs of erosion
- Generally good soil surface condition
- Generally good to moderate ground cover (40-70% at the end of the dry season)



## C CONDITION (POOR)

HAS THE FOLLOWING CHARACTERISTICS:

- Pasture dominated by less-favourable, unpalatable or annual plants
- Pasture growth and response to rain reduced by 55%
- Rated at 45% of the long-term carrying capacity
- May have weed infestations
- May have obvious signs of past erosion and/or declining soil surface condition
- Generally moderate to poor ground cover (often 40% at the end of the dry season)



## D CONDITION (DEGRADED)

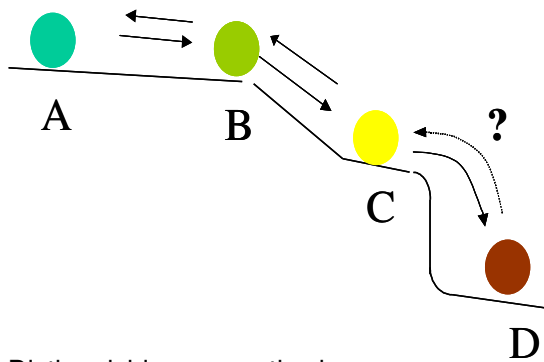
HAS THE FOLLOWING CHARACTERISTICS:

- Pasture based on less-favourable, unpalatable or annual plants
- Pasture growth and response to rain reduced by 75%
- Rated at 25% of the long-term carrying capacity
- Will often have weed infestations
- Will often have obvious erosion, resulting in hostile environments for plant growth
- Moderate to poor ground cover (generally less than 40% at the end of the dry season)



## Getting the language right ...

**Land condition:** the capacity of grazing land to respond to rainfall and produce useful forage. It is a good surrogate measure of ecosystem function as it looks at how well solar energy is being captured, how nutrients are cycling and how efficiently rainfall is being used.



The way land moves between land condition ratings is not always the same and reversing changes is not always easy. Land in A condition is relatively stable and land trending towards B condition can be easily reverted back to A with management changes like wet season spelling. Land in B condition can easily slip into C condition and require major management changes and time to revert back to B condition. Land in C condition can quickly fall into D condition and require a large input of external energy (mechanical or chemical) providing the soil condition has not been adversely impacted.

Distinguishing cosmetic changes as opposed to real changes is also an important consideration when looking at land condition. A run of dry years may make A condition land look like B condition, when in reality one good wet season will revert the landscape back to a classic-looking A condition. Land in C condition may appear to be in better condition after a run of good wet seasons however perennial grass density may still be low and soil organic matter and biological activity are slow to recover.

## Pasture species typical to forest country:

<b>Favoured Species</b>	<b>Less favourable</b>	<b>Unpalatable</b>	<b>Annuals</b>
Black speargrass	Golden beard grass	Wire grasses	Sedges
Kangaroo grass	Pitted bluegrass	Bottlewasher grass	Button grass
Desert bluegrass	Windmill grass	Wanderrie grass	Small burr grass
Hairy panic	Barbwire grass	Love grasses	Flannel weeds

**Long term carrying capacity:** The average number of animals a paddock can carry over a planning horizon (more than 10 years) without degrading land condition. It takes into account the different land types that may be present, their condition, tree cover and how evenly the cattle use the paddock.

**Soil surface condition:** The capacity of soil to absorb rainfall, provide a habitat for seed germination and pasture growth and resist erosion. Although there is no one easy measurement, periodic observations provide useful insight.

