12-1998

# Pastoral resources and their management in the Sandstone-Yalgoo-Paynes Find area, Western Australia

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Miscellaneous publication 1/98
ISSN 1326-4168
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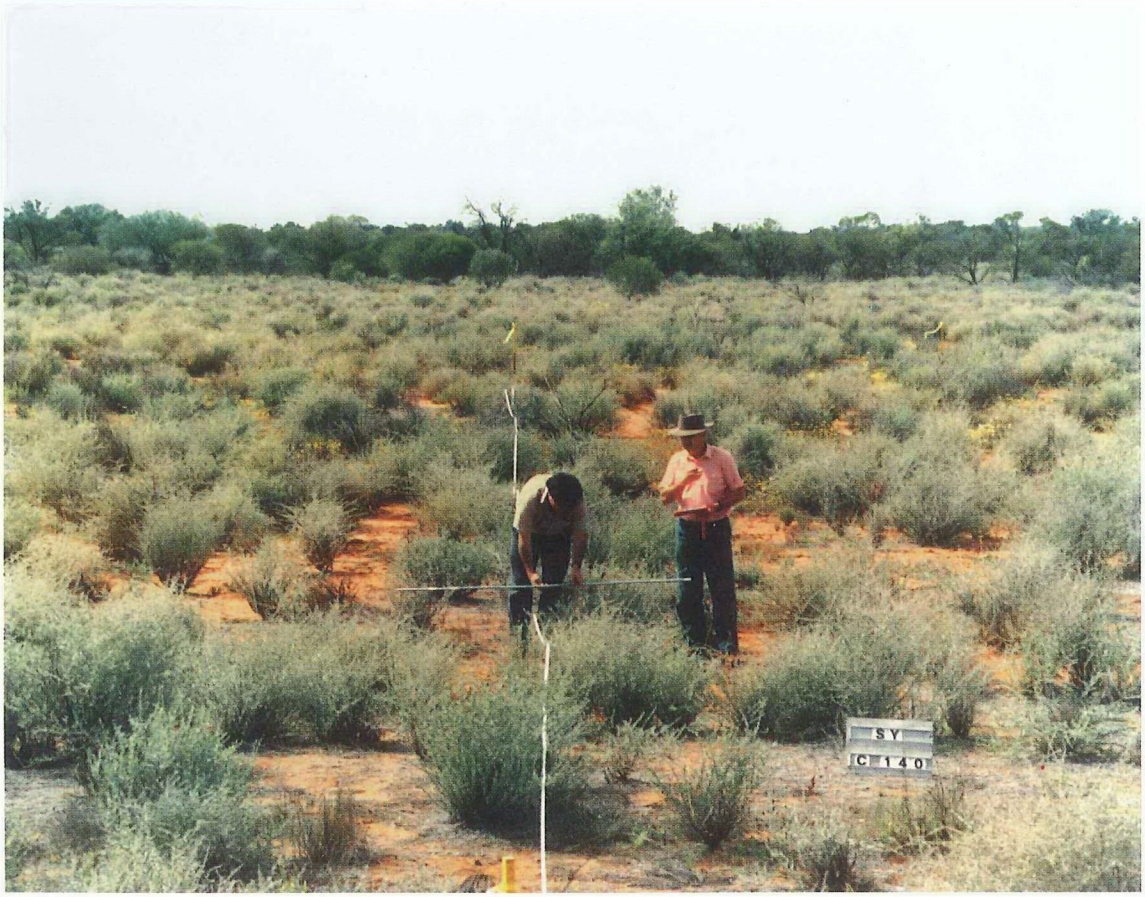


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# PASTORAL RESOURCES AND THEIR MANAGEMENT IN THE SANDSTONE-YALGOO-PAYNES FIND AREA, WESTERN AUSTRALIA

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# Introduction

This report covers about 94,700 square kilometres of rangelands in the Sandstone-Yalgoo-Paynes Find area of Western Australia (Figure 1). The area lies within 27°S and 30°S latitudes, and 115°30'E and 120°E longitudes and includes the towns of Sandstone, Yalgoo and Paynes Find. The northern, southern and eastern limits of the survey area are largely defined by the boundaries of the 1:250,000 scale series map sheets shown in Figure 2. The western limit is the boundary between the pastoral and agricultural area.

There are 66 leasehold pastoral stations wholly (55) or partly (11) within the survey area (Figure 3). The following stations fall wholly within the survey area:

| | | | |
|---|---|---|---|
| Atley | Dandaraga | Mouroubra | Thundelarra |
| Badja | Diemals | Mt Elvire | Wagga Wagga |
| Barnong | Gidgee | Mt Gibson | Wanarra |
| Barrambie | Iowna | Munbinia | Warriedar |
| Bimbijy | Jibberding | Muralgarra | White Wells |
| Black Hill | Kadji Kadji | Nalbarra | Windimurra |
| Black Range | Karara | Narndee | Windsor |
| Booylgoo Spring | Kirkalocka | Ninghan | Wogarno |
| Bulga Downs | Lake Barlee | Oudabunna | Wydgee |
| Bunnawarra | Lake Mason | Perangery | Yarrabubba |
| Burnerbinmah | Lochada | Pindabunna | Youanmi Downs |
| Carlaminda | Maranalgo | Pullagaroo | Yowergabbie |
| Cashmere Downs | Meeline | Remlap | Yuinmery |
| Challa | Mellenbye | Tallering | |

Those stations only partly covered by the survey include those already partly covered by the Murchison survey (Curry *et al.* 1994); Cogla Downs, Edah, Gabyon, Murrum, Noongal and Wandina, those partly covered by the north-eastern Goldfields survey (Pringle *et al.* 1994); Kaluwiri and Yeelirrie, and those partly covered by the Wiluna-Meekatharra survey (Mabbutt *et al.* 1963) ; Hillview and Youno Downs. Mount Jackson has not been previously surveyed and was only partly covered in this survey.

The rangeland survey in the Sandstone-Yalgoo-Paynes Find area of Western Australia was conducted jointly by Agriculture Western Australia and the Department of Land Administration in 1992 and 1993. Agriculture Western Australia Technical Bulletin No. 90 (Payne *et al.* 1998) reports the findings of this survey. This pastoral resources report should be used in conjunction with the Technical Bulletin which provides a detailed description of the natural resources of the survey area and their condition. It is intended to assist pastoralists in station management, and others involved with the pastoral industry.

The first section describes how rangeland survey information can be used in pastoral management. Management implications and options for different types of rangeland are then described. A description of the climate of the area, particularly in terms of its impact on pastoral management is provided, followed by a brief summary of current pastoral management practices.

The final section consists of resource summaries for each of the stations (or parts thereof) covered by the survey. A summary of the land types on each station is presented, followed by more detailed information on the land systems and their range condition and recommended carrying capacities. The carrying capacities presented are an estimate of sustainable pastoral productivity for each land system assuming all feral animals and kangaroos are under control. In most years, carrying capacity is primarily determined by the type of country and by seasonal conditions (which are characteristically highly variable). The figures suggested in this report are for a 'normal year' (a fair winter followed by a poor summer), to be carried over summer (see the 'Climate' chapter of this report).

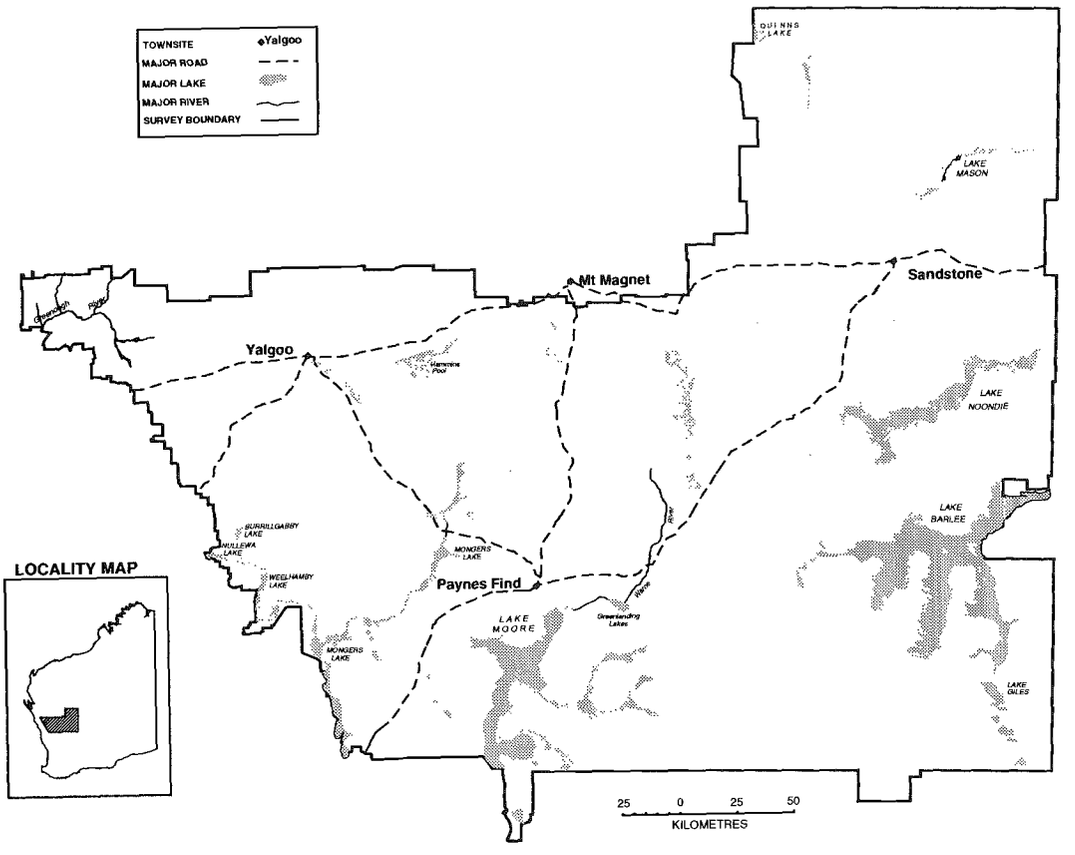



Figure 1. Location map of the Sandstone-Yalgoo-Paynes Find survey area.

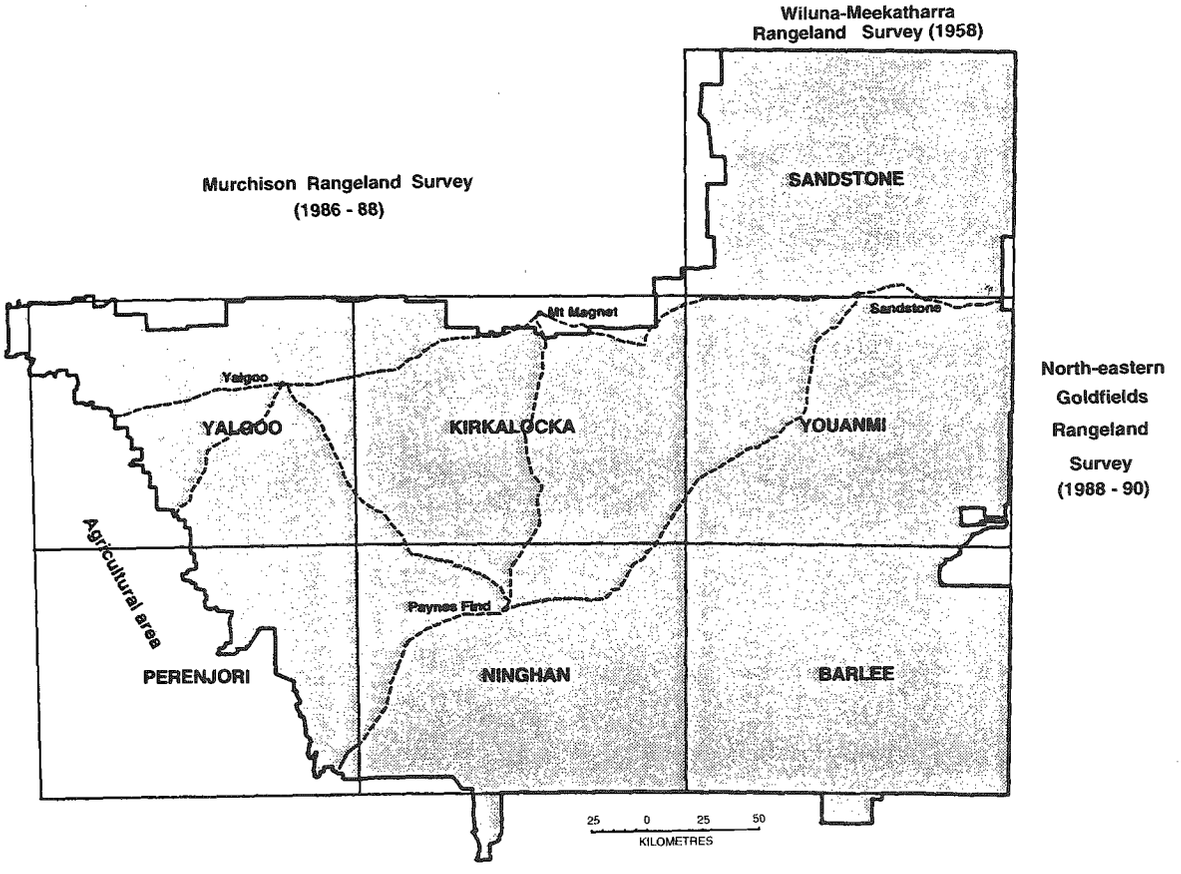



Figure 2. The 1:250,000 map sheets covering the survey area.

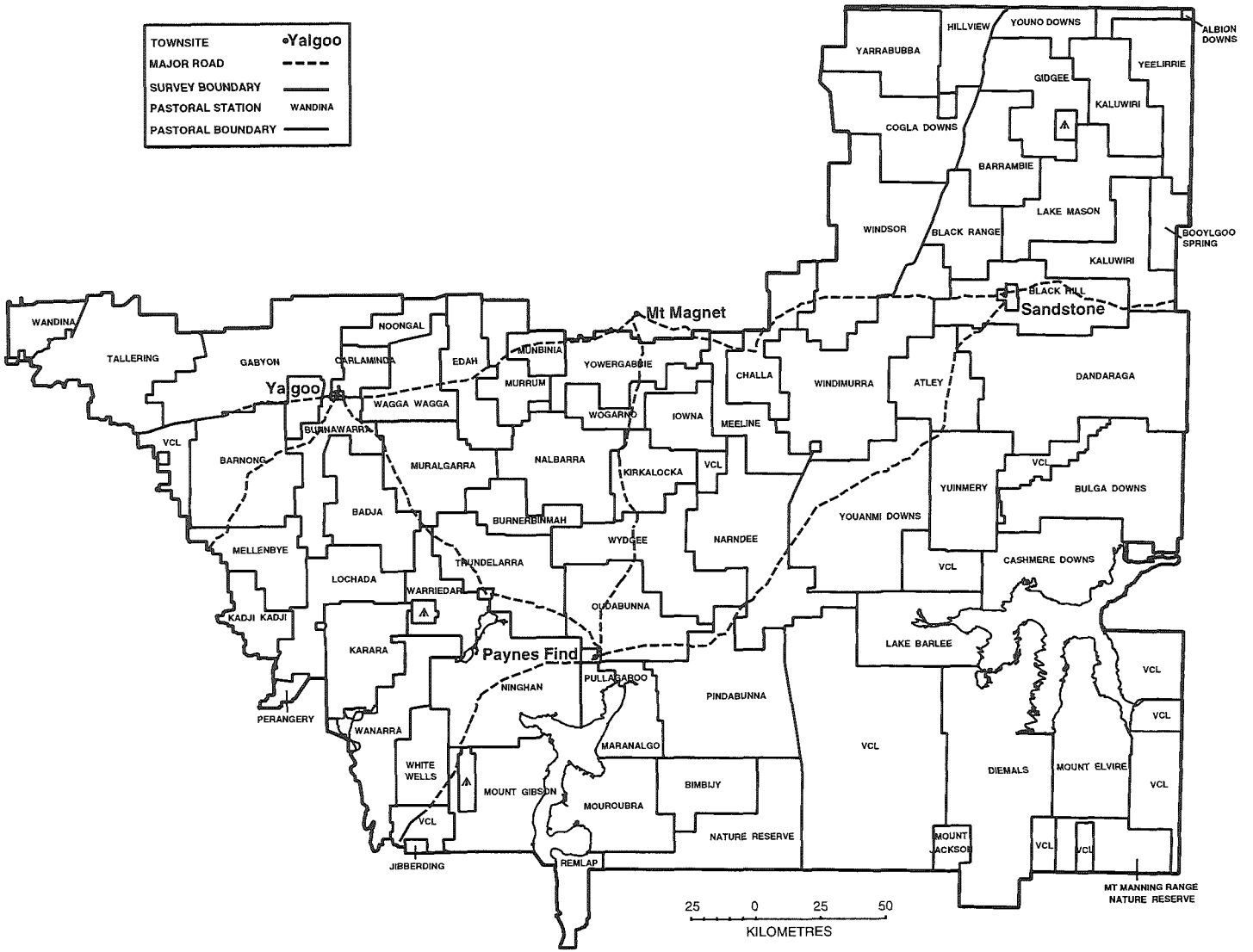



Figure 3. Pastoral stations within the survey area.

# Chapter 1

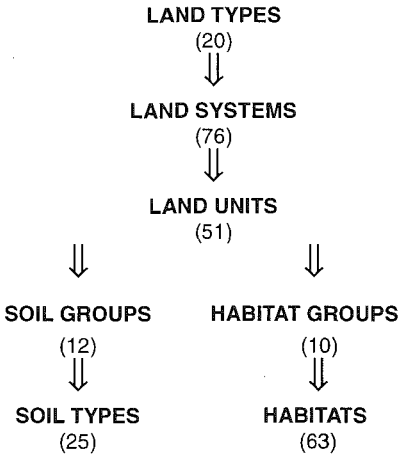
# Using rangeland survey information in pastoral management

Rangeland surveys provide information that is useful for pastoral management in four major areas:

- description and assessment of the land
- assessing grazing impact
- land use planning
- individual property management

## (i) Description and assessment of the land

The report on the rangeland survey of the Sandstone-Yalgoo-Paynes Find area (Payne *et al.* 1998) describes the natural resources using the heirarchy shown below.




Land types are broad groups of land systems that have similar landscape and pastoral characteristics. The seventy-six land systems are grouped into 20 land types.

Each land system is made up of a number of land units. Land units are generally described in terms of their landform eg. hardpan plain, hillslope. They often respond to grazing and other management practices in different ways.

In the survey area 25 soil types within 12 soil groups were described. These soils have different responses to management impacts, for example with different susceptibility to erosion and different requirements for regeneration techniques.

Habitats are an ecological classification based on plant community, soil type and landform. They are often called 'pasture types' in pastoral references. There are 63 habitats in ten habitat groups described in the survey area.

Rangeland surveys provide an assessment of the condition of the land. There were 9435 assessments of range condition made at 1 km intervals throughout the survey area. These are summarised and discussed in the survey report. The assessments give an insight into how historic management has affected grazing values.

Severely degraded and eroded areas are areas where perennial vegetation cover is severely reduced and the soils have some degree of accelerated erosion. These areas are identified and mapped out during rangeland surveys because of their importance in terms of lost ecological function, reduced or lost grazing value, increased run-off and dust hazard. About 144.6 km$^2$ (or 0.15%) of the survey area was mapped as severely degraded and eroded.

Parts of the landscape most susceptible to degradation are described in the survey report. Areas most susceptible include breakaway footslopes, distributary fans, alluvial plains subject to channelised flow and flooding, hardpan wash plains where hydrological processes are disrupted, and sites supporting vegetation types which are highly preferred by grazing animals.

Land types, land systems, range condition assessments and severely degraded and eroded areas are shown on station plans and on the 1:500,000 scale resource map which accompanies Technical Bulletin No. 90.

## (ii) Assessing grazing impact

Land managers and administrators must have an understanding of the influence of grazing on rangeland ecosystems to ensure management is appropriate and sustainable. The traditional idea of gradual and consistent change in the condition of rangeland resources in response to increasing or decreasing stocking rate has been largely replaced by a view that major change happens episodically, during drought or in an extremely good season (Westoby 1980). However, inappropriate or continuously excessive grazing pressure can still bring about severe degradation even in 'normal' years (Pringle 1994, Watson, Westoby and Holm 1997).

Habitats, which occur at a landform/plant community scale, are used as a basis to indicate grazing impacts. Grazing impacts and plant indicator species are described in the 'Ecological assessment' section of Technical Bulletin No. 90 and are summarised according to habitat groups in Chapter 2 of this report.

The main indicators of grazing impacts are:

- the density and mix of palatable plants;
- the density of unpalatable shrubs;
- the prominence of palatable plants which are particularly sensitive to grazing;
- the health and stability of the soil.

The condition of the land resources, in terms of grazing impacts, was assessed during field work. Seventy-seven per cent of all traverse assessments indicated vegetation was in very good, good or fair condition. This may be regarded as acceptable condition. The remaining 23% indicated poor or very poor vegetation condition, with either considerable loss of palatable perennial plants or general loss of perennial plants, or, in some cases, marked increases in cover by unpalatable species ('woody weeds').

Vegetation condition and soil erosion are often closely related. Decline in vegetation condition involving decreases in total shrub cover as a result of grazing, means that soil surfaces are increasingly exposed to the effects of wind and water. Erosion is likely to begin (unless the surface is inherently resistant such as with a stony mantle) and to accelerate if vegetation cover continues to decline. However, in some instances of substantial grazing impact, the vegetation changes to dense 'woody weeds', which enhance soil stability. Accelerated erosion was recorded at 5.3% of the traverse assessments: 4.9% of assessments indicated slight, minor or moderate erosion (i.e. < 50% of the surface affected) and 0.4% showed severe or extreme erosion (50% of the surface affected). Most of the accelerated erosion was caused by water, rather than wind.

*This photograph demonstrates the value of exclosures to show how pastoral country can be altered under inappropriate stocking rates. On the outside of the exclosure preferential grazing has led to the loss of palatable perennial shrubs, which normally provide protection to the soil surface and provide fodder in dry times. Inside the exclosure vigorous saltbushes indicate the degree of change that has occurred.*

## (iii) Land use planning

Rangeland survey information provides an integrated framework for management planning at several scales and for a variety of objectives. These may range from the use of information at the land type scale for regional land use planning or selecting representative conservation reserves, to the use of soil type information for determining mining hazards, or vegetation types for planning ecotourism.

The information, at its various scales, can be used in many ways for pastoral land use planning and management.

Information at a land type scale can be used to help develop district pastoral management principles and options. The 20 land types described in this survey area are depicted as different colour-coded areas on the 1:500,000 scale map which accompanies Technical Bulletin No. 90 and on the 1:100,000 scale station plans. They occur at about the same scale as a pastoral paddock (i.e. average size roughly 25 $km^2$ ) although any one pastoral paddock usually contains parts of more than one land type. Each land type has different management options which are suggested in Chapter 2 of this report.

Land systems represent further definition and description of the broad land types and have been mapped individually as specific areas within each broad land type. The land system approach to mapping enables extensive arid and semi-arid regions to be mapped at the smallest scale (1:100,000) that is useful for land use management and planning, and infrastructure design, across very broad catchments. Land system boundaries can be reproduced onto topographical maps or pastoral plans at any required scale.

Land units generally have an area of 1 to 100 ha although some units, such as hardpan plains, may be much larger, occasionally up to 1000 ha (5 km x 2 km). Land units within each land system in the survey area have been described, but not mapped. Land units can be identified from aerial photography or other remotely sensed imagery at scales of 1:100,000 or larger. A land system often includes one or more land units which are particularly sensitive to management practices. Once these land units have been identified, the effects of land management can generally be assessed from its effects on these key land units. This is particularly useful in more detailed land use studies such as monitoring the impact of mining. The sensitivity of particular land units to water erosion, wind erosion, flooding and inundation are presented in the 'Soils' section of Technical Bulletin No. 90.

Land unit information can also be used in planning site developments such as buildings and roads. It can be used for planning intensive agriculture, such as irrigated horticulture. These alternative industries on pastoral enterprises are becoming more important as economic pressures on pastoral activities increase.

Habitats mostly occur at the same scale as the land unit and can be identified on the ground by key features of vegetation structure and composition and their position in the landscape. Identification of habitats is usually possible by association with the land unit. Information at a habitat scale can be used to

identify indicators of land management, such as grazing impact, and for planning a range monitoring system.

Severely degraded and eroded areas occur at a scale similar to that of the land unit, although individual areas may often extend across adjacent units. This information can be used in planning regeneration programs such as to control dust around a town or in individual property planning.

## (iv) Individual property management

It is important for the pastoral industry to protect its basic resources; the vegetation, and the soil which supports it. Pastoral management should maintain areas in good condition and improve the condition in other areas. Pastoral experience in the southern shrublands of Western Australia has indicated that conservative stocking, combined with effective control of all large grazing animals, provides the most powerful means for managers to maintain per capita income from livestock production and to maintain range condition (e.g. see the Land Conservation District reports 'Mulga, merinos and managers', and 'Managing pastures for long-term prosperity').

Management of pastoral stations involves a variety of considerations which have to be integrated into a long-term strategy. The strategy should allow for short-term, opportunistic management responses, such as spelling after a major rainfall event to encourage the survival of seedlings of useful perennial shrubs. Climate and climate variability have a major impact on rangeland management and rangeland processes. Its implications for pastoral management are discussed in Chapter 3 of this report.

The rangeland survey information can be used for individual property planning in many different ways, some of these are presented below.

*Setting stocking rates based on land capability*

In Chapter 5 of this report resources are described for each station in terms of land systems, their total areas and their condition. Resource condition assessments, presented on station plans and summarised in the individual station reports, indicate how the survey team assessed the condition of different areas of each station. This information may highlight parts of the station which have been used beyond their capability or which areas are in the best condition.

Recommended carrying capacities are given for each land system in good, fair and poor condition. Areas in poor condition usually do not have the capacity to carry as many animals as those in good condition. More importantly, areas in poor condition have little drought durability; they cannot carry stock for long during drought. This is important in this region where prolonged dry periods are normal.

A stocking rate based on land capability can be calculated when information on the land systems in a particular paddock (or other management area) is combined with the recommended carrying capacities for those land systems at current range condition. This can be done at a station or paddock scale. The information in this report is provided on a station basis. Assistance to generate this information at a paddock scale is available from local district officers of Agriculture Western Australia.

*Participants at a workshop on stocking rates held by the Yalgoo Land Conservation District in November 1996.*

The land system information can also be used to consider the type of stock to put into paddocks based on the vegetation types found on each land system in the paddock. In general, breeding ewes and rams should be put into paddocks with productive perennial shrubs and grasses (such as lake country) and wethers put into more seasonal country (such as wanderrie grass country). In good seasons it is less important what type of stock are put into particular paddocks.

Factors that influence the distribution of grazing, such as the location of watering points or different grazing preferences, must be considered. A paddock is often made up of more than one type of country, with different pastoral potentials and stock preference. Productivity and stock preference have to be balanced to prevent preferential overgrazing.

*Fencing according to land type*

Many fences in the area are approaching the end of their useful life. It is critical to sustainable land use that there is an ongoing replacement program for fencing. Uncontrolled grazing allows preferential grazing of favoured habitats which will lead to degradation. This is the time to plan fencing or relocation of fencing according to land type by using

the 1:100,000 station plans and the pastoral characteristics of land types discussed in Chapter 2 of this report.

Fencing according to land type has two major benefits. Areas within a paddock can be managed more effectively if that management unit has similar land types with similar management requirements. Secondly, more even distribution of grazing across the paddock will be achieved; similar land types in the paddock will have similar grazing preferences so stock will not be as selective within the paddock. Overgrazing, caused by preferential grazing, or under-utilisation of pastures within the paddock will be minimised.

*Water point location*

The strategic location of watering points can also help spread grazing more evenly across paddocks and hence reduce selective grazing. Inadequate distribution of watering points has caused localised land degradation close to waters and at the same time valuable pastures at greater distances from watering points have remained unused. Planning the location of watering points or relocation of existing watering points can be done using 1:100,000 station plans and information on different land types, particularly at the land unit or habitat scale, in this report and in Technical Bulletin No. 90.

The following recommendations are from 'Spacing water points in the southern pastoral areas of Western Australia', by Burnside, Williams and Curry (1990).

- Watering points should be no further than 5 to 8 km apart for sheep and 10 to 16 km apart for cattle. Where either feed or water is saline the recommended distance is at the lower end of the range.

- Troughs in the corner of paddocks have relatively concentrated approaches and hence grazing pressure for the same number of stock is greater than for troughs more centrally located in a paddock. Watering points should be located away from fences wherever possible so that animals have 360° access to the water. Alternatively, additional watering points should be installed to spread grazing pressure or the number of animals should be reduced.

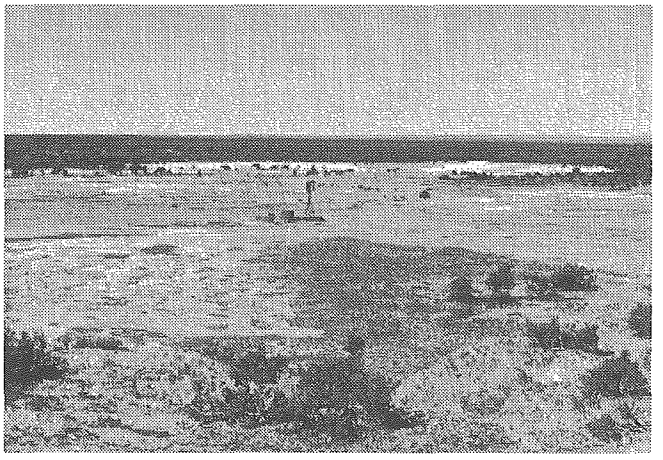
- Where possible the watering point should be located on an area of low susceptibility to erosion in an area of resilient pasture (e.g. a spinifex sandplain or a stony plain within an acacia-eremophila shrubland), but with ready access to good pastures. The location of watering points can be used to make stock travel a few kilometres to graze favoured or fragile country and thus make more use of poorer country closer to the water point. Many of the severely degraded and eroded areas observed during the survey have been caused by the location of permanent watering points, with a long history of grazing, on or near highly susceptible land units.

- Many pastoralists have observed the tendency for sheep to graze into the wind. The location of water points away from fences in the direction of prevailing winds will help prevent over-grazing of that part of the paddock. Prevailing winds in this area are generally from the south to south-east.

*Regeneration of areas in poor condition*

Assessments of soil and vegetation condition are shown on the 1:500,000 scale resource map and station plans. Areas where the perennial vegetation has been degraded but the soil surfaces are still largely intact

*This breakaway footslope, in good condition with no soil erosion, supports an excellent mix of palatable perennial shrubs such as bladder saltbush, shy bluebush and sago bush. However, the soils on breakaway footslopes are particularly susceptible to soil erosion and require careful management and monitoring to prevent degradation in these preferentially grazed areas.*



*Location of a watering point on an area which is susceptible to preferential grazing has led to widespread loss of the original perennial vegetation which once protected the fragile soil surface from erosion. This has led to loss of topsoil on this breakaway footslope. Erosion of breakaway footslopes is common where the water points are close to the footslope. Continued erosion of such areas can be stopped by relocating water points away from their existing site.*

can be improved by careful management including strategic spelling and reducing total grazing pressure through control of feral and native herbivores as well as domestic stock. The extent to which total grazing pressure is controlled on these areas will be critical to the speed of recovery. If the area is being degraded because it is being preferentially grazed, re-fencing and/or relocating watering points by land type boundaries will control uneven grazing preferences.

A lack of perennial seed reserves, particularly of palatable shrubs, may be the critical factor limiting regeneration in areas with poor condition vegetation but where soil surfaces remain undamaged and highly responsive to rain.

*Management of severely degraded and eroded areas*

*The perennial vegetation in this area has been removed through preferential grazing, however the productive soils still support a good cover of annual forage.*

The natural resource map and station plans show areas that have been mapped as 'severely degraded and eroded'. These areas usually have little or no perennial vegetation remaining and the soil surface is bare and eroded.

Complete withdrawal from grazing use to assist regeneration may be the best option for severely degraded and eroded areas, particularly where accelerated erosion is evident or may occur with continued grazing pressure. To encourage regeneration and stop soil erosion, the affected area, including less degraded edges and residual patches within the area, would require fenced protection from further grazing. Again, the extent to which total grazing pressure is controlled on spelled areas will be critical to their regeneration, so control programs for reducing the impact of kangaroos and goats must be maintained.

Grazing pressure can be reduced by removing the supply of permanent water, for example by closing down a mill, fencing out a natural water supply or relocating a supply using a pipeline.

Recovery of severely degraded and eroded areas within a reasonable time may require the use of mechanical regeneration as well as grazing control.

For successful regeneration there must be adequate available soil moisture for plant germination and establishment and suitable niches on the soil surface in which a seed can lodge, germinate and establish. Many regeneration techniques may be used to trap and use rainfall better. These include land shaping (such as embankments and water ponding), cultivation techniques (using implements such as ploughs and pitters which also provide a suitable bed for seeds), and soil amelioration (Williams and Shepherd 1991). Soil amelioration may be required for soils that contain high levels of salts, particularly sodium salts. The low levels of available soil moisture often associated with these saline or sodic soils can be improved with soil ameliorants. Regeneration trials in the arid shrublands showed gypsum to be a successful soil ameliorant in encouraging perennial shrub establishment on sodic soils (Ward 1990).

Mechanical regeneration techniques and reseeding (where there are no remnant native plants left to act as seed sources) are expensive. They all have limitations, and selection of the most suitable method will depend on soil type and position in the landscape. The techniques and how to determine which is the most appropriate method to use on any particular site are described in 'A guide to mechanical rangeland regeneration' (Addison 1997). Strict grazing control must be practised while plants are establishing. An economic analysis on predicted returns needs to be done before any work is begun. It will almost never be profitable to undertake mechanical regeneration on severely degraded and eroded areas.

*Range monitoring*

Changes in range condition are often slow and difficult to detect. Memory alone cannot be expected to track change over many years. However, a monitoring system can be installed as a means to provide a permanent record of change.

Range monitoring provides a formalised means by which information on vegetation and soil surface characteristics can be incorporated into the decision making process. Management decisions regarding the number and distribution of stock, as well as on tools such as spelling, burning and relocation of fences and watering points, can be made within the context of changes observed on permanent monitoring sites.

A permanent system also provides a means by which the long term effects of managers' actions can be demonstrated. Management that uses a monitoring system is more likely to enable sustainable production from the rangelands.

Photographing the same site at repeated intervals is a simple and effective method of monitoring in the rangelands. The photographic site provides powerful visual evidence of change which can be reassessed and interpreted quickly. The current number and type of stock in the paddock as well as climatic factors such as recent seasonal conditions need to be recorded to enable interpretation of the monitoring information.

Assistance to set up monitoring sites is available to pastoralists through Agriculture Western Australia's Pastoralists' Photographic Monitoring System (PPMS).

Land system distributions within paddocks are useful for locating monitoring sites (Holm *et al.* 1987). Sites which are representative of the paddock can be located on the basis of the paddock's composition of types of country. Land system maps and descriptions can also be used to locate monitoring sites in sensitive areas most likely to show change and provide an early warning system for the paddock. Monitoring sites are located and assessed at a land unit or a habitat scale. Information presented in Chapter 2 of this report, and in greater detail in the 'Land systems' and 'Ecological assessment' sections of Technical Bulletin No. 90, will provide insights as to which habitats or land units are most appropriate to monitor.

# Chapter 2

# The rangelands

As discussed in Chapter 1 land types, land systems, habitats and habitat groups were used to classify the rangelands in the Sandstone-Yalgoo-Paynes Find survey area. These are described in detail in the report on the survey (Payne *et al.* 1998), and land systems within land types were mapped onto the resource map which accompanies the report and on individual station plans.

*The major role of the rangeland survey team is to map and describe the landforms, soils and vegetation within the survey area.*

## 2.1 Land types

### 2.1.1 Land types and their land systems

Land systems within a land type generally have similar pastoral potentials and management requirements. Seventy-six land systems grouped into 20 land types were described and mapped in the Sandstone-Yalgoo-Paynes Find survey area. They are listed in Table 1.

The habitats and their proportions which make up the land system determine the pastoral potential of a land system. Each habitat was given an estimated carrying capacity. To determine the carrying capacity for the whole land system the proportion of its component habitats (based on the land system descriptions given in Technical Bulletin No. 90) was multiplied by each habitat's capacity. For simplicity, the land systems were then grouped according to seven categories of pastoral potential. The groups and their suggested carrying capacities are presented in Chapter 5.

It is important to note that not all parts of a particular land type or land system may have the same pastoral potential. For example, breakaway land systems may include saline footslopes supporting saltbush and bluebush shrublands with high pastoral potential and lower stony plains with acacia-eremophila shrublands with moderate pastoral potential. The overall carrying capacity given for the land system is the average for that system.

**Land type 1: Hills with acacia shrublands**
(3552 km$^2$, 3.8% of survey area)

All but one of the systems in this land type have low or very low pastoral potential as they support mainly very sparse shrublands with many species which are not readily grazed. Areas supporting saltbush and bluebush pastures are, where present, generally scattered and very small and hence are prone to preferential grazing and consequent degradation. Drought durability is very low. These systems are most suited to running wethers at low stocking rates, although the hillslopes can support abundant annual herbs and grasses in good seasons, and stocking rates can be safely increased. Wiluna land system has moderately high pastoral potential as it supports halophytic shrublands on its extensive lower plains and in its drainage zones.

Soils are usually shallow and very stony. The soil surfaces are generally stable and not susceptible to erosion because of protective stony mantles.

Some areas may be quite rugged and inaccessible to domestic stock. This country may provide refuge areas for goats in areas where substantial efforts have been made to eradicate them.

*Major habitat group:* A

**Land type 2: Hills with mixed shrublands**
(921 km$^2$, 1.0% of survey area)

The land systems in this land type have low to very low pastoral potential. They support mixed shrublands with low shrubs which are mostly unpalatable heath-like species such as *Thryptomene, Eriostemon* and *Hemigenia*. Drought durability is very low; use of this type of country is restricted to times when there is a good herbage cover. These systems are most suited to running wethers at very low stocking rates.

Soils are usually shallow and very stony. The soil surfaces are generally stable and not susceptible to erosion because of protective stony mantles.

*Major habitat group:* A

**Table 1. Land types and their land systems**

| Land type | Description and land systems |
|---|---|
| 1 | **Hills with acacia shrublands** |
| | Land systems - Bevon, Brooking, Gabanintha, Mulline, Naluthanna, Norie, Teutonic, Watson and Wiluna |
| 2 | **Hills with mixed shrublands** |
| | Land systems - Dryandra, Singleton and Tallering |
| 3 | **Low hills with eucalypt-halophyte woodlands and acacia shrublands** |
| | Land systems - Graves and Lawrence |
| 4 | **Breakaways, stony plains and sandy surfaced plains on granite with mulga shrublands and minor halophytic shrublands** |
| | Land systems - Euchre, Narryer, Olympic, Sherwood and Waguin |
| 5 | **Breakaways and alluvial plains with predominantly saline soils and halophytic shrublands** |
| | Land systems - Gumbreak, Hootanui and Yilgangi |
| 6 | **Plains with gritty surfaces and low tors and domes on granite with acacia shrublands** |
| | Land systems - Bandy and Challenge |
| 7 | **Irregular plains and low rises supporting mulga, bowgada and some halophytic shrublands** |
| | Land systems - Nerramyne, Nubev and Violet |
| 8 | **Stony plains and lower alluvial plains with predominantly saline soils and halophytic shrublands** |
| | Land systems - Austin, Gransal, Moriarty and Nallex |
| 9 | **Stony plains and occasional low rises with acacia-eremophila shrublands** |
| | Land systems - Felix, Windarra and Yarrameedie |
| 10 | **Sandplains with spinifex hummock grasslands** |
| | Land systems - Bullimore, Marmion and Tyrrell |
| 11 | **Sandplains with acacia shrublands, mallees and heath** |
| | Land systems - Bannar and Joseph |
| 12 | **Sandplains with grassy acacia shrublands** |
| | Land systems - Kalli |
| 13 | **Wash plains on hardpan with mulga shrublands** |
| | Land systems - Hamilton, Jundee, Rainbow, Ranch, Tindalarra, Woodline and Yalluwin |
| 14 | **Wash plains and sandy tracts on hardpan, with mulga shrublands and wanderrie grasses** |
| | Land systems - Bunny, Monk and Yanganoo |
| 15 | **Wash plains on hardpan with mixed halophytic and non-halophytic shrublands** |
| | Land systems - Marlow, Monitor and Tango |
| 16 | **Plains with deep sandy soils supporting acacia shrublands and occasionally with wanderrie grasses** |
| | Land systems - Ararak, Desdemona, Illaara, Tealtoo and Yowie |
| 17 | **Alluvial plains with saline soils and predominantly with halophytic shrublands** |
| | Land systems - Campsite, Ero, Joy, Merbla, Racecourse, Roderick, Skipper, Steer, Wilson and Yewin |
| 18 | **Calcreted drainage plains with mixed halophytic and non-halophytic shrublands** |
| | Land systems - Cosmo, Cunyu, Melaleuca and Mileura |
| 19 | **Plains with minor calcrete inclusions with casuarina-acacia shrublands or eucalypt woodlands** |
| | Land systems - Deadman, Doney and Pindar |
| 20 | **Salt lakes and fringing alluvial plains with halophytic shrublands** |
| | Land systems - Carnegie |

**Land type 3: Low hills with eucalypt-halophyte woodlands and acacia shrublands** (176 km$^2$, 0.2% of survey area)

The two land systems in this land type have moderately high pastoral potential. The lower plains and drainage tracts support eucalypt woodlands with prominent saltbush and bluebush understoreys. These vegetation communities have good drought durability and are suited to running ewes or weaners. Seasonal production of herbage is generally excellent. The hills and hillslopes support acacia dominated shrublands with low pastoral potential and poor drought durability.

The soils are considerably better than those of land type 1 and 2. Soil erosion can be a problem in narrow alluvial tracts receiving concentrated flow and therefore the placement of watering points in the vicinity of these areas should be avoided if possible.

*Major habitat groups:* A on hills and hillslopes, D on lower plains and drainage floors.

**Land type 4: Breakaways, stony plains and sandy surfaced plains on granite with mulga shrublands and minor halophytic shrublands** (7631 km$^2$, 8.1% of survey area)

The land systems in this land type have moderate to moderately high pastoral potential. Most of the country supports mulga shrublands but the alluvial plains below breakaways and the narrow lower drainage floors support halophytic (saltbush/ bluebush) shrublands. The halophytic shrublands generally have a higher pastoral potential than the mulga shrublands, and are subject to preferential grazing. As the halophytic shrublands are minor units they may be degraded by overgrazing and consequent soil erosion. If these two types of vegetation occur in the same paddock the stocking rate should be set assuming the stock will graze mainly in the preferred halophytic areas.

Soils on the preferentially grazed areas are very fragile and soil erosion is encountered even in ungrazed areas. The placement of water points and fencing can partly overcome these degradation hazards by making stock walk out at least 2 km to these areas. Water points located on saline plains below breakaways or on saline drainage floors are likely to result in considerable degradation.

Drought durability is reliant on the small areas of halophytic shrubland. Light stocking rates at such times will prevent degradation in these areas. Some pastoralists in the survey area set their stocking rates in this country according to how much halophytic area is in the paddock and allocating zero stocking rates to the other vegetation types in the paddock. This allows for preferential grazing by keeping total grazing pressure low.

*Major habitat groups:* B on granitic soils, C on saline plains.

**Land type 5: Breakaways and alluvial plains with predominantly saline soils and halophytic shrublands** (827 km$^2$, 0.9% of survey area)

This type of country has moderately high to high pastoral potential, with a greater component of halophytic shrublands than land type 4. The halophytic shrublands have good drought durability and are suited to running any class of stock.

In common with land type 4, breakaway footslopes in this country have very fragile soils and are susceptible to overgrazing and soil erosion. Waters should therefore be placed at least 2 km from them.

*Major habitat groups:* C on stony plains and breakaway footslopes, D on alluvial plains and drainage tracts.

**Land type 6: Plains with gritty surfaces and low tors and domes on granite with acacia shrublands** (4293 km$^2$, 4.5% of survey area)

The scattered palatable low shrubs in this land type give it moderate pastoral potential although drought durability is poor. The country is best suited to running wethers although it is capable of producing abundant annual forage in good seasons when other classes of stock may be run.

Soils are generally shallow and soil surfaces are mostly protected by stony or gritty mantles.

*Major habitat group:* B

**Land type 7: Irregular plains and low rises supporting mulga, bowgada and some halophytic shrublands** (2665 km$^2$, 2.8% of survey area)

This land type has low to moderately high pastoral potential according to the extent of alluvial plains and drainage floors supporting halophytic shrublands. These halophytic shrublands need to be protected from preferential overgrazing particularly on drainage floors which are susceptible to soil erosion. Stone and gravel mantles protect the soil surface elsewhere.

*Major habitat group:* B

**Land type 8: Stony plains and lower alluvial plains with predominantly saline soils and halophytic shrublands** (2068 km$^2$, 2.2% of survey area)

The extensive halophytic shrublands on this land type gives it moderately high to high pastoral potential with good drought durability. It is well suited to all classes of stock and especially breeders. The vegetation of this land type is highly preferred for grazing by goats and kangaroos rendering it susceptible to overgrazing and consequent degradation.

Soil erosion is a hazard on alluvial plains not protected by stone mantles. Preferential overgrazing of drainage tracts can lead to increased erosion.

*Major habitat group:* C

**Land type 9: Stony plains and occasional low rises with acacia-eremophila shrublands** (548 km$^2$, 0.6% of survey area)

This land type has moderate to low pastoral potential with poor drought durability. Palatable low shrubs are scattered and this country is best suited to running wethers.

Soils are generally stony and shallow with abundant stony mantles protecting the soil surface.

*Major habitat group:* B

**Land type 10: Sandplains with spinifex hummock grasslands** (12,359 km$^2$, 13.0% of survey area)

The pastoral potential of this country is very low as it supports vegetation that is almost entirely unattractive to stock unless it has been recently burnt. Short-term improvement of pastures can be achieved by burning to encourage volunteer short-lived herbs, low shrubs and grasses. This country can then be used while other more productive areas are rested. Stocking rates need to be opportunistic and depend on the area and quality of forage regrowth, which will generally decline with successive seasons as spinifex resumes dominance. Prescribed burns need to be well controlled to prevent fires spreading to adjacent stations or damaging adjacent less fire-adapted vegetation and station infrastructure. Firebreaks will minimise capital losses and help to restrict wildfires.

Wind erosion may occur after fire, however stabilisation is usually rapid following rain and consequent regeneration of vegetation.

Workshops conducted by the Wiluna and Sandstone Land Conservation District Committees (Tauss 1991, Williams and Tauss 1991) brought together local knowledge of management on this type of country. Booklets on these workshops' findings are available from Agriculture Western Australia offices.

This land type was rated at 50 ha/dse. This is not meant as a year in, year out rate. In these land types, forage species may persist for up to four to five years after fire, before spinifex takes over again (Wilcox 1972). However, no single rate or set of rates can be given for burnt spinifex because the regrowth varies from fire to fire, partly reflecting different sequences of seasons after the fire.

*Major habitat group:* I

**Land type 11: Sandplains with acacia shrublands, mallees and heath** (11,549 km$^2$, 12.2% of survey area)

The pastoral potential of this country is low for Bannar land system and negligible for Joseph land system. Joseph is dominated by perennial vegetation which is unattractive to stock and which is too dense to allow significant stands of annuals in good seasons.

*Major habitat group:* J

**Land type 12: Sandplains with grassy shrublands** (4954 km$^2$, 5.2% of survey area)

The pastoral potential of this country is low. It supports acacia shrublands with very scattered palatable low shrubs and patchy grasses. It has very poor drought durability and is best suited to running wethers.

*Major habitat group:* J

**Land type 13: Wash plains on hardpan with mulga shrublands** (13,073 km$^2$, 13.8% of survey area)

This country has moderate pastoral potential, except for Tindalarra land system which has moderately high pastoral potential. It supports acacia shrublands with palatable undershrubs. Tindalarra land system also supports a minor component of halophytic shrubs in the drainage tracts. These areas are subject to preferential grazing and may become degraded as a consequence. Production of annual herbs and grasses provides abundant forage in good seasons, when any class of stock may be run. Otherwise, this country is best suited to wethers on a year-round basis. The construction of tracks in this country can cause widespread shrub deaths caused by water starvation downslope if natural sheet water flows are substantially obstructed.

Soil erosion is rarely encountered in this country, but may be initiated by the inappropriate siting and construction of tracks, roads or fences.

*Major habitat group:* G

**Land type 14: Wash plains and sandy tracts on hardpan, with mulga shrublands and wanderrie grasses** (5114 km$^2$, 5.4% of survey area)

This country has moderate to moderately high pastoral potential. It differs from land type 13 in that it supports wanderrie grasses in sandy areas such as wanderrie banks. It has moderate drought durability. Production of annual herbs and grasses as well as perennial wanderrie grasses is substantial in good seasons. This country, particularly where wanderrie grasses are abundant, is very productive in good summer seasons and can support any class of stock at such times. On a year-round basis it is best suited to wethers.

Soil erosion is rarely encountered in this flat country with poorly developed drainage features. Obstruction of natural water flows can cause water starvation and consequent loss of vigour in vegetation downslope.

*Major habitat groups:* G on hardpan plains, H on loamy plains.

**Land type 15: Wash plains on hardpan with mixed halophytic and non-halophytic shrublands** (289 km$^2$, 0.3% of survey area)

This country has moderately high pastoral potential as it supports a good mix of palatable halophytic and non-halophytic shrubs below the mulga. Production of annual herbs and grasses is substantial in good seasons. It has moderate to good drought durability and is suitable for all classes of sheep.

Soil erosion is common on Monitor land system as it is prone to preferential grazing and receives and transports overland flow.

*Major habitat group:* G

**Land type 16: Plains with deep loamy soils supporting acacia shrublands and occasionally with wanderrie grasses** (10,191 km$^2$, 10.8% of survey area)

This country has low to moderate pastoral potential. Palatable perennial shrubs are generally sparse and hence drought durability is low and wethers are best suited for it on a year-round basis. Production of wanderrie grasses in open shrublands can be prolific in good seasons, with best responses in warmer months, when other classes of stock may be used for a short time.

Drainage features on this generally flat country are poorly developed and soil erosion is rarely encountered.

*Major habitat groups:* H on loamy plains, G on hardpan plains and E on calcrete plains.

**Land type 17: Alluvial plains with saline soils and predominantly with halophytic shrublands** (1513 km$^2$, 1.6% of survey area)

The extensive saltbush/bluebush shrublands on this country gives it moderately high to very high pastoral potential and excellent drought durability when in good range condition. The perennial shrublands in this country are preferentially grazed and are prone to degradation and consequent accelerated soil erosion. Where possible, waters should be placed some distance (at least 2 km) away from areas subject to substantial water flows, or stock should be denied access at the point (e.g. fence dams) and the water should be piped away to less fragile country. Much of this country has been degraded by historical mismanagement and requires very careful management to improve or maintain perennial shrub cover and soil stability.

*Major habitat group:* D

**Land type 18: Calcreted drainage plains with mixed halophytic and non-halophytic shrublands** (1237 km$^2$, 1.3% of survey area)

Pastoral potential in this type of country ranges from moderate to high depending on the proportion of saltbush/bluebush shrublands. Stock, goats and kangaroos preferentially graze this type of country and effective management requires control of all sources of grazing pressure. Where saltbush/bluebush shrublands are extensive and in good range condition this country has excellent drought durability and can support all classes of stock on a year-round basis.

Soil erosion is not common, although it may occur in areas between calcrete platforms that receive substantial run-on.

*Major habitat groups:* E on calcrete plains, D on alluvial plains, I on sandplain and G on loamy plains.

**Land type 19: Plains with minor calcrete inclusions with casuarina-acacia shrublands or eucalypt woodlands** (3019 km$^2$, 3.2% of survey area)

This country has moderate to moderately high pastoral potential. Small areas of saltbush/bluebush shrublands in low lying areas adjacent to salt lakes may be preferentially grazed. Drought durability is generally poor and wethers are best suited to this country on a year-round basis. Production of annual herbs and grasses is substantial in good seasons.

*Major habitat groups:* E on calcrete plains, H on loamy plains.

**Land type 20: Salt lakes and fringing alluvial plains with halophytic shrublands** (8649 km$^2$, 9.1% of survey area)

This type of country supports saltbush/bluebush shrublands which give it high pastoral potential and good drought durability when it is in good range condition. It is suitable for any class of stock but is probably best reserved for use by pregnant and lactating ewes or rams. Lake country represents the 'haystack' country type on which best stock can be brought through prolonged dry spells with minimal losses. Its maintenance in good range condition therefore ensures drought durability of the station as a whole.

The alluvial plains on this country are fairly flat, and hence water erosion is only a problem in minor areas receiving more concentrated flow. The vegetation of this country is highly preferred for grazing. Reduction of vegetative cover following overgrazing leaves soil surfaces susceptible to wind erosion.

*Major habitat group:* D

## 2.1.2 Management options for land types

Table 2 lists some pastoral management options available for the maintenance and improvement of the 20 land types within the survey area. Options are given for each land type where the vegetation condition is good to fair and where it is poor, and for severely degraded and eroded areas (sde) within the land type. Areas of sde were observed in 10 of the 20 land types during the survey. These options are based on recommendations made by P.J. Curry (pers. comm.). The options that are listed as starting points for consideration are as follows.

*1. Year-long grazing (Y)*

This is the standard method for management practice in the area. Its potential for land recovery lies in devising an appropriate stocking rate for the particular paddock. The extensive research literature on the relative impact of different grazing systems suggests that, throughout the world, deriving an appropriate stocking rate for the ongoing conditions is the most powerful variable in the management of semi-arid and arid rangelands. This report provides information which will assist in setting this stocking level. Chapter 5 describes pastoral potential, resource condition and recommends carrying capacities for each land system on individual stations. However, variations in seasonal conditions are common and this suggests that stocking rates should be flexible in response to seasons, rather than being fixed.

*2. Rotational grazing or seasonal deferrals (R)*

This option involves regular patterns of seasonal grazing use followed by a season of resting the pasture. Rotations should be commenced and managed according to the level of utilisation rather than according to set or fixed time periods. Grazing deferral of high pastoral potential vegetation, such as saltbush and bluebush shrublands, over summer has been the more common practice. There is little to indicate to what extent gains in vegetation condition reported from leases using this management system are attributable to the grazing deferrals as distinct from the application of lower stocking rates as calculated on a year-long average.

Even in the absence of any significant advantages in vegetation conservation or animal production, grazing deferrals and rotations are managerially and economically attractive in that less land is under grazing use (and requiring managerial inputs) at any one time.

*3. Opportunistic grazing in good seasons (O)*

Grazing areas comprised of low or very low pastoral potential land systems support few palatable perennial plants and have little capacity to maintain stock during adverse seasons.

Stocking rates applicable for such paddocks during adverse seasonal conditions may be so low on a year-long basis that, depending on prevailing commodity prices and enterprise economics, there is low likelihood of profitability from maintaining year-long grazing and the cost of maintaining infrastructure in such paddocks.

Opportunistic grazing which uses short-lived annual or ephemeral pasture growing after significant rainfall can allow short-term (i.e. single season) grazing at higher stocking rates. Some areas suited to such use will then require complete and indefinite deferral from continued grazing until after one or more subsequent growth periods. Careful monitoring of plant utilisation rates is essential in such situations which, if over-extended, can result in damage to the residual perennial vegetation and sudden plunges in animal nutrition.

Land types of moderate or high pastoral value can also be used in this way, if other considerations make it appropriate to do so.

*4. Spelling and/or destocking and/or dewatering areas in poor condition (D)*

Complete withdrawal from grazing use to facilitate accelerated regeneration may be the desired option for land in poor condition, particularly where accelerated erosion is evident or is a risk.

The extent to which all grazing pressure is controlled within the paddock will be critical to the speed of recovery given the particular seasonal conditions that follow. Continuing the availability of permanent water in the troughs or overflow at windmills will tend to maintain compensatory grazing pressure by kangaroos and goats. Control programs and technologies for reducing impact by kangaroos and goats, such as a total grazing management system through the use of permanent trap yards (Pearce, Elliott and Rouda, 1998) are relevant here.

Areas with stable, healthy soil surfaces are more likely to respond to spelling.

*5. Water point relocation (W)*

Many areas of severe degradation and erosion within the survey area have been caused through the chronic effects experienced at permanent water points grazed for 80 to 90 years or more on or near highly susceptible land units. For example, many of the wells and bores sunk on the wash plains of land type 13 were sited on the edge of concentrated flow zones. The shallow soils found on such units are highly susceptible to erosion. Where they are eroded to the hardpan, soil loss is total and the land degradation may be permanent.

Ongoing erosion of such areas can be mitigated (and the dietary intake for stock improved) by relocating water points away from their existing sites (Burnside, Williams and Curry 1990).

*6. Fenced protection from grazing (F)*

Areas that are severely degraded and eroded require fenced protection from further grazing to encourage regeneration and arrest erosion. Such protection will enhance recovery commencing from the less degraded edges and residual patches around and within severely degraded areas.

Refencing by land type boundaries is a valuable means to control major differences in grazing preference between land types within the paddock. In situations where a degraded zone of high potential preferred land (such as Mileura land system) occupies only 5 to 20% of the paddock area, it is unlikely that wholly equitable grazing management can be established without refencing by land type.

*7. Seed reserve augmentation (S)*

The most widespread and general symptom of poor vegetation condition in the survey area is the loss of palatable perennial understorey plants in mulga shrublands on hardpan wash plains of the land systems in land types 13, 14 and 15. In most parts of such areas, soil surfaces remain undamaged and highly responsive seasonally. A lack of perennial seed reserves may be the critical factor limiting regeneration.

Bulk litter obtained from intact sites ('seed reserves') of the same vegetation type and distributed over areas in poor condition may have potential to initiate recovery in good seasons.

Attempts to re-seed severely degraded and eroded areas without cultivation have proved futile. In such cases the soil surface has lost the ability to support basic ecological processes such as infiltration, and nutrient recycling and storage. This is the critical feature preventing regeneration on eroded landscapes, not lack of seed reserves.

*8. Strategic burning (B)*

The use of fire as a tool in vegetation management has an application to the spinifex grasslands on sandplains of land type 10. These require prescribed burning to maximise productive potential by maintaining diversity of palatable short-lived species which emerge after fire. See Tauss (1991) and Williams and Tauss (1991).

*9. Mechanical intervention (M)*

Mechanical intervention of some kind has been attempted by some pastoral managers to treat severely degraded and eroded areas. In most cases the results have been disappointing. To be successful, mechanical intervention must be approached at a catchment scale, and be combined with effective control of all grazing pressure. Research in the southern shrublands has also highlighted the need for more appropriate techniques for plant selection and seedling establishment (Addison 1997, Ward 1990, Williams and Shepherd 1991).

From both sub-catchment and economic perspectives, mechanical intervention is best viewed as a high cost, high risk rehabilitation process which is best deferred as a management option until a range of other larger scale management priorities are in place.

*10. Reduction of populations of goats and kangaroos (K)*

The ability of pastoral managers to apply landcare practices that improve land condition depends as much on their capacity to control the grazing of kangaroos and goats as it does on the control of stock numbers and the areas stock graze.

Research and census of the populations of feral goats and kangaroos in the arid zone generally has shown that commercial culling programs have had no significant impact on the numbers of either species. A Feral Goat Eradication Campaign was instigated by pastoral Land Conservation Districts in the area, and commenced in 1991. Eradication is not seen as an appropriate or accepted goal for red kangaroos anywhere. Ongoing research and development aimed at devising methods for effective managerial control

through depriving the animals access to (artificial) stock watering points offers the best prospect for success.

Controlling all populations of large grazing animals on pastoral lease land is the essential pre-requisite for maximising the potential of management for land conservation.

**Table 2. Some pastoral management options for the conservation of land types**

| Land type (see Table 1 for component land systems) | | Vegetation condition | | Severely degraded and eroded areas (sde) |
|---|---|---|---|---|
| | | Good-fair | Poor | |
| 1. | Hills with acacia shrublands | Y R O K | O K | Not relevant |
| 2. | Hills with mixed shrublands | Y R O K | O K | Not relevant |
| 3. | Low hills with eucalypt - halophyte woodlands and acacia shrublands | Y R O K | O K | Not relevant |
| 4. | Breakaways, stony plains and sandy surfaced plains on granite with mulga shrublands and minor halophytic shrublands | Y R O K | Y R O D K | D W F K |
| 5. | Breakaways and alluvial plains with predominantly saline soils and halophytic shrublands | Y R O K | Y R O D W F S M K | D W F M K |
| 6. | Plains with gritty surfaces and low tors and domes on granite with acacia shrublands | Y R O K | O S K | Not relevant |
| 7. | Irregular plains and low rises supporting mulga, bowgada and some halophytic shrublands | Y R O K | Y R O D K | Not relevant |
| 8. | Stony plains and lower alluvial plains with predominantly saline soils and halophytic shrublands | Y R O K | Y R O D K | D W F K |
| 9. | Stony plains and occasional low rises with acacia - eremophila shrublands | Y R O K | O K | O D W F K |
| 10 | Sandplains with spinifex hummock grasslands | O B | Not relevant | Not relevant |
| 11. | Sandplains with acacia shrublands, mallees and heath | O | Not relevant | Not relevant |
| 12. | Sandplains with grassy acacia shrublands | Y R O B K | O D B K | Not relevant |
| 13. | Wash plains on hardpan with mulga shrublands | Y R O K | Y R O D S K | O D W F M K |
| 14. | Wash plains and sandy tracts on hardpan, with mulga shrublands and wanderrie grasses | Y R O W B K | Y R O D W S B K | O D W F M K |
| 15. | Wash plains on hardpan with mixed halophytic and non-halophytic shrublands | Y R O K | Y R O D S K | O D W F M K |
| 16. | Plains with deep sandy soils supporting acacia shrublands and occasionally with wanderrie grasses | Y R O W B K | Y R O D W S B K | Not relevant |
| 17. | Alluvial plains with saline soils and predominantly with halophytic shrublands | Y R O F K | Y R O D W F M K | D W F M K |
| 18. | Calcreted drainage plains with mixed halophytic and non-halophytic shrublands | Y R O K | Y R O D K | D W F S M K |
| 19. | Plains with minor calcrete inclusions with casuarina- acacia shrublands or eucalypt woodlands | Y R O K | Y R O D K | Not relevant |
| 20. | Salt lakes and fringing alluvial plains with halophytic shrublands | Y R O W K | Y R O D W K | D W F M K |

Y Year-long grazing
R Rotational grazing or deferral
O Opportunistic grazing in seasons
D Spelling, destocking and dewatering
W Water point relocation
F Fenced protection from grazing
S Seed reserve augmentation
B Strategic burning
M Mechanical cultivation and rehabilitation
K Population reduction in kangaroos after eradication of goats

## 2.2 Habitats and habitat groups

In the 'Ecological assessment' section of Technical Bulletin No. 90, grazing impacts are discussed for the habitats identified within the survey area, and detailed quantitative data are presented for some. The pastoral and range condition characteristics and indicator species of the ten habitat groups, comprising of 63 habitats (Table 3) are summarised in this report.

**Table 3. Habitat groups and their habitats (from Payne *et al.* 1998)**

| Habitat group | Habitats |
|---|---|
| **A Hill, ridge and breakaway plateau sclerophyll shrubland or woodland habitats** | |
| | Breakaway mixed shrubland |
| | Greenstone hill acacia shrubland |
| | Greenstone hill mixed woodland or shrubland |
| | Granite hill mixed shrubland |
| | Stony ironstone acacia shrubland |
| | Stony ironstone mulga shrubland |
| | Upland fringing thicket |
| | Ironstone ridge mixed shrubland |
| **B Stony plain and low rise sclerophyll shrubland habitats** | |
| | Granitic acacia *Borya* shrubland |
| | Stony acacia eremophila shrubland |
| | Sandy granitic acacia shrubland |
| | Granitic melaleuca acacia shrubland |
| **C Stony plain and low rise chenopod shrubland (and occasional woodland) habitats** | |
| | Breakaway footslope chenopod low shrubland |
| | Breakaway footslope eucalypt woodland with chenopod understorey |
| | Stony plain bluebush mixed shrubland |
| | Upland small bluebush species shrubland |
| | Stony saltbush mixed shrubland |
| **D Alluvial plain with conspicuous chenopod shrubland (and occasional woodland) habitats** | |
| | Alluvial plain snakewood chenopod shrubland |
| | Bladder saltbush low shrubland |
| | Gilgai grassy low shrubland |
| | Plain eucalypt chenopod woodland |
| | Plain York gum chenopod woodland |
| | Plain sago bush shrubland |
| | Plain mixed halophyte shrubland |
| | Samphire flat |
| | Sandy bank lake shrubland |
| | Silver saltbush shrubland |
| | Drainage tract acacia shrubland/woodland with chenopod understorey |
| | Frankenia low shrubland |
| | Mixed chenopod shrubland with mulga overstorey |
| | Plain oldman saltbush shrubland |
| **E Calcrete or kopi associated shrubland or woodland habitats** | |
| | Calcrete platform woodland |
| | Calcrete platform jam shrubland |
| | Calcareous casuarina acacia shrubland or woodland |
| | Kopi dune or plain woodland |
| **F Drainage focus sclerophyll habitats** | |
| | Melaleuca swamp shrubland |
| | Acacia with claypan grass understorey |
| | Plain drainage focus thicket |
| | Cane grass swamp |
| | Lignum swamp |
| **G Broad sheet flood hardpan plain sclerophyll shrubland or woodland habitats** | |
| | Hardpan plain mulga shrubland |
| | Hardpan plain acacia shrubland |
| | Hardpan plain mulga shrubland with scattered chenopods |
| | Drainage tract acacia shrubland |
| | Creek bank woodland or shrubland |
| | Hardpan plain mulga grove |
| | 'Lateritic' hardpan plain mulga shrubland |
| | Hardpan plain mulga and bowgada shrubland or woodland |
| | Wanderrie bank grassy mulga shrubland |
| | Creekline bottlebrush shrubland |

**Table 3. Habitat groups and their habitats (from Payne *et al.* 1998)** — *continued*

| Habitat group | Habitats |
|---|---|
| **H** | **Plains transitional to sandplain with sclerophyll shrubland or woodland habitats** |
| | Plain York gum acacia woodland |
| | Plain native pine acacia woodland or shrubland |
| | Plain sandy loam mulga shrubland |
| | Mulga wanderrie grassland or shrubland |
| **I** | **Sandplain hummock grassland habitats** |
| | Sandplain spinifex hummock grassland |
| | Sandplain mulga spinifex hummock grassland |
| **J** | **Sandplain sclerophyll shrubland habitats** |
| | Sandplain grassy bowgada shrubland |
| | Sandplain acacia shrubland |
| | Lateritic sandplain acacia shrubland |
| | Lateritic sandplain heath |
| | Sandplain close mixed shrubland |
| | Sandplain with mallees and acacias |
| | Sand dune shrubland |

As discussed previously habitats are used to assess resource condition. Within the plant community some plants are favoured and others are disadvantaged by particular grazing strategies. Each type of rangeland has characteristic species which indicate the condition (for purposes of pastoral use) of the vegetation, known as 'indicator species'. Table 4 shows categories of indicator values. Some species are more sensitive to grazing than others in the same category, for example, shy bluebush (*Maireana platycarpa*) is much more easily removed from chenopod communities than sago bush (*M. pyramidata*) but both are classified as decreasers. A particular species may be in one category when it occurs in one habitat but be in a different category when it occurs in another. For example, Wilcox bush (*Eremophila forrestii*) is a decreaser on the granite habitats in group B, but has no indicator value on sandplain habitats in group J where it is generally not grazed. More detailed information on many of the common species found in this area, including their indicator values, is contained in 'Arid shrubland plants of Western Australia' (Mitchell and Wilcox 1988, 1994). By being able to distinguish plant species, land managers can determine the impact of their management practices, and set goals in terms of the numbers and species of plants they want on the property.

**Table 4. Species indicator values**

| | |
|---|---|
| **Decreaser** | Species which decrease in number as grazing pressure increases (e.g. mulga bluebush - *Maireana convexa* or shy bluebush - *Maireana platycarpa*). These are palatable species which are also known as 'desirables'. |
| **Increaser** | Species which increase in number as grazing pressure increases (e.g. needle bush - *Hakea preissii*, or desert cassia - *Senna artemisioides* subsp. *filifolia*). These are unpalatable species known as 'undesirables' or 'woody weeds'. |
| **No indicator value** | Species which are largely unaffected by grazing and which usually only decrease in number after natural disturbances such as hail damage or fire (e.g. mulga - *Acacia aneura* - and bowgada – *A. ramulosa*). These species are usually not very palatable and are known as 'stability desirables'. |
| **Intermediate** | Species which may initially increase under grazing, but being moderately palatable decrease under continued increasing grazing pressure (e.g. three winged bluebush - *M. triptera*). |

### Habitat group A: Hill, ridge and breakaway plateau sclerophyll shrubland or woodland habitats

*Pastoral and range condition characteristics*

This group of habitats occur high in the landscape on shallow, stony soils. They are sparse with mulga (*Acacia aneura*) and other acacias, such as granite wattle (*A.quadrimarginea*), with cassias (*Senna* spp.), poverty bushes (*Eremophila* spp.) and *Ptilotus* undershrubs. They have very low to low pastoral potential and are not preferred grazing habitats for stock. Long-term grazing impacts involve the removal of palatable shrubs, however the absence of these species may reflect natural variability rather than loss through grazing pressure. The stone mantles provide effective protection against soil erosion.

#### Indicator species

| Decreasers | | | Increasers | | |
|---|---|---|---|---|---|
| *Enchylaena tomentosa* | – | ruby saltbush | *Senna artemisioides* subsp. *filifolia* | – | desert cassia |
| *Eremophila latrobei* | – | warty-leaf eremophila | *Dodonea lobulata* | – | bead hopbush |
| *Eremophila forrestii* | – | Wilcox bush | | | |
| *Maireana convexa* | – | mulga bluebush | | | |
| *Maireana georgei* | – | golden bluebush | | | |
| *Maireana planifolia* | – | flat-leaved bluebush | | | |
| *Ptilotus obovatus* | – | cotton bush | | | |
| *Ptilotus schwartzii* | – | horse mulla mulla | | | |
| *Sida calyxhymenia* | – | tall sida | | | |

### Habitat group B: Stony plain and low rise sclerophyll shrubland habitats

*Pastoral and range condition characteristics*

These habitats occur on granite country. The vegetation consists of scattered shrublands dominated by acacias, poverty bushes, cassias and mulla mullas with moderate pastoral potential. Heavy grazing will lead to reductions in palatable shrub species, but again natural variation is high and it can be difficult to separate grazing impacts. Grazing piospheres out from man-made watering points may not be distinct in granite country because of the availability of natural sources of standing water such as permanent gnamma holes. Soils are generally shallow sands or loams which have low susceptibility to erosion.

#### Indicator species

| Decreasers | | |
|---|---|---|
| *Enchylaena tomentosa* | – | ruby saltbush |
| *Eremophila compacta* | – | felty fuchsia bush |
| *Eremophila forrestii* | – | Wilcox bush |
| *Eremophila latrobei* | – | warty-leaf eremophila |
| *Maireana planifolia* | – | flat-leaved bluebush |
| *Ptilotus obovatus* | – | cotton bush |
| *Ptilotus schwartzii* | – | horse mulla mulla |
| *Rhagodia eremaea* | – | tall saltbush |
| *Sida calyxhymenia* | – | tall sida |

### Habitat group C: Stony plain and low rise chenopod shrubland habitats

*Pastoral and range condition characteristics*

These are upland habitats that support chenopod shrublands, sometimes with a eucalypt overstorey. Soils are usually shallow, saline duplexes (loam over clay) that are susceptible to erosion where they are not protected by surface stones. They have moderately high to high pastoral potential, and are subject to preferential grazing. Almost all species are palatable, removal of these species leaves the fragile soils exposed to erosion. Degradation of these habitats caused by long-term excessive grazing was observed during the survey. Degradation is not easily reversed as soil and landscape processes collapse under excessive grazing pressure.

**Indicator species**

| Decreasers | | | Increasers | | |
|---|---|---|---|---|---|
| *Atriplex bunburyana* | – | silver saltbush | *Eremophila lachnocalyx* | – | |
| *Atriplex vesicaria* | – | bladder saltbush | *Hakea preissii* | – | needlebush |
| *Enchylaena tomentosa* | – | ruby saltbush | *Senna artemisioides* subsp. *sturtii* | – | variable cassia |
| *Frankenia* spp. | – | frankenia | | | |
| *Maireana georgei* | – | golden bluebush | | | |
| *Maireana glomerifolia* | – | ball-leaf bluebush | | | |
| *Maireana platycarpa* | – | shy bluebush | | | |
| *Rhagodia eremaea* | – | tall saltbush | | | |

Species which are only moderately palatable, such as sago bush (*Maireana pyramidata*) and cotton bush (*Ptilotus obovatus*) act as intermediate species. They may become more abundant with grazing pressure, but will be removed under excessive grazing pressure.

### Habitat group D: Alluvial plain with conspicuous chenopod shrubland habitats

*Pastoral and range condition characteristics*

This group occurs in depositional landscapes with fragile soils. Pastoral potential of the chenopod shrublands varies between moderate and very high. These habitats produce abundant annual forbs and grasses in good seasons, and have good drought durability through the palatable perennials in drier times. They are subject to preferential grazing and soils are inherently susceptible to erosion. Overgrazing can lead to a reduced cover and abundance of palatable shrubs. It is important to protect soil surfaces by maintaining vegetation cover, some areas in the survey area carrying concentrated flow are now severely degraded and eroded with subsoil exposure and scalding.

**Indicator species**

| Decreasers | | | Increasers | | |
|---|---|---|---|---|---|
| *Atriplex bunburyana* | – | silver saltbush | *Acacia victoriae* | – | prickly acacia |
| *Atriplex vesicaria* | – | bladder saltbush | *Hakea preissii* | – | needlebush |
| *Enchylaena tomentosa* | – | ruby saltbush | *Maireana triptera* | – | three winged bluebush |
| *Maireana atkinsiana* | – | bronze bluebush | *Senna artemisioides* subsp. *filifolia* | – | desert cassia |
| *Maireana georgei* | – | golden bluebush | *Solanum orbiculatum* | – | wild tomato |
| *Maireana platycarpa* | – | shy bluebush | | | |

### Habitat group E: Calcrete or kopi associated shrubland or woodland habitats

*Pastoral and range condition characteristics*

This group of habitats is associated with salt lake systems, occurring on calcrete or kopi deposits. They are scattered low woodlands of casuarina or eucalypts with acacia and cassia shrubs, or fine-leaf jam (*Acacia acuminata* subsp. *burkittii*) shrublands. They have variable pastoral potential, ranging from low for the habitats on kopi deposits to moderately high for habitats on calcrete platforms. The calcrete habitats support excellent annual growth which is very attractive to stock, and to native and feral herbivores, and are often preferentially grazed. Soils are shallow and rubbly or deep kopi deposits which are generally well crusted and stable.

**Indicator species**

| Decreasers | | | Increasers | | |
|---|---|---|---|---|---|
| *Enchylaena tomentosa* | – | ruby saltbush | *Senna artemisioides* subsp. *filifolia* | – | desert cassia |
| *Maireana georgei* | – | golden bluebush | *Solanum orbiculatum* | – | wild tomato |
| *Ptilotus obovatus* | – | cotton bush | | | |

### Habitat group F: Drainage focus sclerophyll habitats

*Pastoral and range condition characteristics*

These habitats are drainage zones in the lowest parts of the landscape in and adjacent to salt lake systems. The acacia shrublands with tussock grass understoreys, thickets and cane grass swamps have moderate pastoral potential. The dense melaleuca swamps and lignum swamps have very low pastoral potential as they are dominated by species that are not generally grazed. Soils are very variable but are most commonly deep and inherently stable. These habitats make up a very small proportion of the survey area but are important as they are 'fertile patches' within the rangeland landscape.

**Indicator species**

| Decreasers | | |
|---|---|---|
| *Atriplex bunburyana* | – | silver saltbush |
| *Enchylaena tomentosa* | – | ruby saltbush |
| *Maireana* spp | – | bluebushes |
| *Ptilotus obovatus* | – | cotton bush |

### Habitat group G: Broad sheet flood hardpan plain sclerophyll shrubland or woodland habitats

*Pastoral and range condition characteristics*

These habitats are extensive throughout the arid shrublands of Western Australia. Most of the habitats are dominated by mulga (*Acacia aneura*), but other acacias such as fine-leaf jam (*A. acuminata* subsp. *burkittii*), bowgada (*A. ramulosa*) and mini-ritchie (*A. grasbyi*), are more prominent towards the south-west of the survey area. The habitats have moderate to moderately high pastoral potential. Soils are shallow clay loams over hardpan. They carry sheet flow, however the dispersive soils are protected from water erosion through biological (lichen, mosses and algae) crusts, very low slope and substantial cover of overstorey plants. Excessive grazing leads to the loss of palatable understorey species and thus reduction in perennial shrub cover and species diversity. Palatable shrubs are removed firstly from open areas rather than from under clumps of overstorey species. The loss of palatable shrubs may sometimes lead to a greater density of unpalatable shrubs. The overstorey is rarely adversely affected, although it was observed to be stressed in exceptionally degraded situations where soil sealing had retarded water infiltration. Degraded habitats respond well to destocking, with minimal management intervention required, as long as a seed source remains. Disruption of overland flow can cause water starvation and consequent shrub deaths.

**Indicator species**

| Decreasers | | | Increasers | | |
|---|---|---|---|---|---|
| *Enchylaena tomentosa* | – | ruby saltbush | *Eremophila georgei* | – | fine-toothed poverty bush |
| *Eremophila forrestii* | – | Wilcox bush | *Eremophila gilesii* | – | turkey bush |
| *Eremophila latrobei* | – | warty-leaf eremophila | | | |
| *Maireana convexa* | – | mulga bluebush | | | |
| *Maireana georgei* | – | golden bluebush | | | |
| *Maireana thesioides* | – | lax bluebush | | | |
| *Ptilotus obovatus* | – | cotton bush | | | |
| *Ptilotus schwartzii* | – | horse mulla mulla | | | |
| *Sida calyxhymenia* | – | tall sida | | | |
| *Spartothamnella teucriiflora* | – | mulga broombush | | | |

### Habitat group H: Plains transitional to sandplain with sclerophyll shrubland or woodland habitats

*Pastoral and range condition characteristics*

This group occurs on nearly level plains with deep loamy or sandy soils and very diffuse run-on. They usually occur adjacent to sandplain systems. They are dominated by York gum (*Eucalyptus loxophleba*) and native pine (*Callitris glaucophylla*) or by mulga. They have moderate pastoral potential except for native pine/acacia shrublands which have very low pastoral potential. Soils are inherently stable. Grazing may cause a reduction of palatable shrubs and grasses which can allow an increase in unpalatable shrubs or grasses.

**Indicator species**

| Decreasers | | | Increasers | | |
|---|---|---|---|---|---|
| *Encylaena tomentosa* | – | ruby saltbush | *Eriachne helmsii* | – | buck wanderrie |
| *Eremophila latrobei* | – | warty-leaf eremophila | *Senna artemisioides* subsp. *filifolia* | – | desert cassia |
| *Maireana convexa* | – | mulga bluebush | *Solanum orbiculatum* | – | wild tomato |
| *Maireana georgei* | – | golden bluebush | | | |
| *Maireana thesioides* | | lax bluebush | | | |
| *Monachather paradoxa* | – | broad-leaf wanderrie | | | |

### Habitat group I: Sandplain hummock grassland habitats

*Pastoral and range condition characteristics*

These habitats occur on red sandplains on the eastern side of the survey area. They have very low long-term pastoral potential, although they can be very productive for a few years after burning. Recently burnt sandplain supports a mixture of palatable short-lived species. As spinifex returns, other grasses and short-lived shrubs die out. Stock, kangaroos and feral herbivores appear to favour burnt spinifex pastures. Wilcox (1972) suggests that sheep can be run on burnt spinifex sandplain for four to five years before spinifex emerges and excludes palatable species. It can then take another ten years before enough fuel has accumulated to carry another prescribed burn, although responses are typically variable and fairly unpredictable. The Wiluna and Sandstone Land Conservation District Committees have collated information on the use of spinifex for pastoralism (Tauss 1991, Williams and Tauss 1991). It is not known whether the mix and abundance of palatable short-lived species can be significantly altered by failure to defer grazing after fire or by the frequency and timing of prescribed burns. The strategic grazing use of spinifex grasslands following fire can be used to reduce grazing pressure on traditionally more heavily utilised habitats. Wind erosion may occur following a fire, but soil surfaces are protected by plant cover which re-emerges soon after rains.

There are no known indicator species in these habitats. On the land system resource maps, for traverse assessments which occurred on the habitats in group I, which are largely unaffected by grazing, the assessment is shown as an asterisk rather than as a rating. For these habitats vegetation condition was almost always very good (rating 1) with no soil erosion.

### Habitat group J: Sandplain sclerophyll shrubland habitats

*Pastoral and range condition characteristics*

These habitats occur on undulating yellow sandplains, mostly in the south and west of the survey area. They are dominated by shrubs rather than spinifex. Most of the habitats have very low pastoral potential. The grassy bowgada shrublands have low pastoral potential as they support only patchy wanderrie grasses, and the close mixed shrublands have negligible pastoral potential. Soils are generally not susceptible to erosion as there is little surface drainage and they are protected from wind by shrub cover. Grazing impacts are rarely seen as these habitats consist mainly of unpalatable species. However, the palatable species that do exist in small proportions may decline under heavy grazing.

For the sand dune shrubland and close mixed shrubland habitats, as with habitats in group I, the traverse assessments on the land system resource maps are shown as an asterisk rather than as a rating. These habitats are largely unaffected by grazing; vegetation condition was almost always very good (rating 1) with no soil erosion.

**Indicator species**

| | Decreasers | |
|---|---|---|
| *Encylaena tomentosa* | – | ruby saltbush |
| *Eremophila eriocalyx* | – | desert pride |
| *Eremophila latrobei* | – | warty-leaf eremophila |
| *Maireana convexa* | – | mulga bluebush |
| *Monachather paradoxa* | – | broad-leaf wanderrie |
| *Ptilotus obovatus* | – | cotton bush |
| *Thyridolepis multiculmis* | – | soft wanderrie, mulga grass |

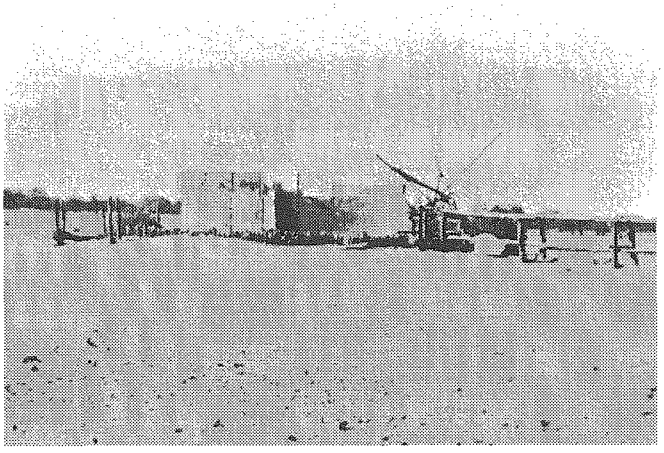
# Chapter 3

# Climate

## Introduction

The climate of the Sandstone-Yalgoo-Paynes Find area is described in detail in the 'Climate' section of Technical Bulletin No. 90. This section is summarised here.

The climate of the area is arid to semi-arid. Rainfall is low, unreliable and highly variable. The local rainfall patterns are also extremely variable, with pastoral stations recording significantly different amounts of rain across the property. Widespread major falls are rare, local minor falls either from frontal activity in winter or thunderstorms in summer are more common. Local hail storms can cause severe damage to vegetation.



*Climate in the survey area is characteristically highly variable. Land managers must contend with events such as droughts, floods and cyclones. This photograph shows some of the effects of a cyclone in 1968 on Challa station.*

Rainfall ranges from winter-dominant in the south and west (about two-thirds of the survey area), to summer-dominant in the north-east with a corresponding decrease in yearly median values from 273 mm at Mouroubra to 180 mm at Challa. However the entire survey area has a more pronounced and reliable growing period in winter rather than in summer.

The summer (November to April) weather pattern is characterised by high daily temperatures with little relief at night, and easterly winds easing and turning to south-easterly at night.

Daily winter (May to October) temperatures are generally cool and may fall to below freezing point at night, particularly when anticyclones are centred over the survey area. In winter local flooding or sheetwash can occur and the large salt lakes may fill.

Relative humidity throughout the survey area is low, particularly in summer in the afternoon when temperature reaches its maximum. Relative humidity will tend to be higher if winds have originated in the west rather than having blown extensively over the land from the east.

The average annual evaporation in the survey area is considerably higher than rainfall with evaporation values ranging from 2500 to 3600 mm, exceeding the rainfall range of 200 to 300 mm by a factor of 12.

Wind direction is predominantly from the south to south-east. This backs up the common observation that sheep graze into the wind resulting in more intense grazing pressure in the south-east quadrant of a paddock, especially if a watering point is present. Winds from the opposite quadrant usually indicate an imminent weather change.

There are times during the year when the easterly passage of a high is blocked with subsequent prolonged absence of wind, sometimes lasting up to two weeks. This creates wind droughts that, particularly in summer, can cause serious problems where thirsty stock rely on water being pumped by windmills.

## Rainfall effectiveness and seasons

The availability of soil moisture (through effective rainfall) is the driving force behind plant growth in arid and semi-arid regions. Growing conditions are also influenced by temperature which, if very low as in some winters, tends to retard growth and in summer increases the rate of evaporative loss of soil moisture. Rainfall is more effective if it comes spread over a couple of days (soaking rain) and when rainfall events occur in sequences, perhaps a few weeks apart (follow-up rains) rather than when rainfall comes in one big storm. A single summer thunderstorm can do more damage than good. The soil is usually fairly bare and so erosion can occur more easily. The rain may also induce germination of seeds which are destined to die because of high temperatures and lack of follow-up rain. Soil seed reserves may be depleted.

The WATBAL computer model provides an assessment of rainfall effectiveness in terms of the availability of sufficient soil moisture to promote vegetation growth. The model takes into account rainfall and potential losses from transpiration, evaporation, internal drainage and run-off. Table 5 shows the result of this assessment for six recording centres in the survey area. The criteria adopted for effective winter rains (May-October) is 30 days of continuously favourable soil moisture and 20 days for effective summer rain (November-April), after an initial rain event of 15 mm.

The table lists the average start date of effective seasons for each of the six centres and the average length of the growing seasons. It also shows the duration of the best and worst seasons on record. Regionally the predominant growing season is winter even in those areas with greater rainfall occurrences in summer, i.e. to the north-east of the survey area.

Paynes Find in the south-west has the longest winter and yearly growing season total (116 and 134 days respectively) with Booylgoo Spring having the shortest winter (78 days) and Mt Magnet having the shortest yearly growing season (99 days).

On average, the growing season in winter lasts for about two to three months in total, whilst in summer it lasts for about two to three and a half weeks. The average length of winter seasons increases to the south and west but in summer the average length of the season increases to the east.

**Table 5. Average start date of effective winter and summer seasons, their average length and extremes**

| | Booylgoo Spring | Cashmere Downs | Diemals | Mt Magnet | Paynes Find | Yalgoo |
|---|---|---|---|---|---|---|
| Average starting date for an effective winter | 9 May ±47 days | 15 May ±35 days | 20 May ±17 days | 29 May ±20 days | 20 May ±19 days | 24 May ±17 days |
| Average starting date for an effective summer | 3 Mar ±35 days | 1 Mar ±39 days | 14 Feb ±65 days | 25 Feb ±31 days | 15 Mar ±50 days | 5 Mar ±34 days |
| Average length of winter growing season (days) | 78 ±39 | 92 ±37 | 108 ±32 | 80 ±32 | 116 ±29 | 100 ±25 |
| Average length of summer growing season (days) | 24 ±18 | 21 ±17 | 23 ±17 | 19 ±19 | 18 ±17 | 14 ±14 |
| Best winter season (days) | 185 | 185 | 185 | 185 | 185 | 175 |
| Worst winter season (days) | 0 | 5 | 15 | 5 | 20 | 20 |
| Best summer season (days) | 70 | 65 | 50 | 25 | 65 | 35 |
| Worst summer season (days) | 0 | 0 | 5 | 0 | 0 | 0 |

Seasons usually break around mid May in winter and mid February to mid March in summer, however there is a great range when this actually occurs. Mid June is generally the latest an effective winter will start, however, the starting date for effective summer seasons can be as early as December and as late as mid April.

Table 6 summarises the number of effective and failed seasons for both winter and summer for each of the centres over the period of time for which rainfall records are available. In some centres favourable seasons are much more reliable than in others. Yalgoo, for example, is fortunate to have 97% of all years on record producing an effective winter season, whereas Booylgoo Spring has had on average only 79% effective winter seasons. The opposite occurs in summer with Yalgoo recording only 13% effective seasons whilst Booylgoo Spring has 34%.

**Table 6. The number of effective and failed seasons for winter and summer**

| | Booylgoo Spring | Cashmere Downs | Diemals | Mt Magnet | Paynes Find | Yalgoo |
|---|---|---|---|---|---|---|
| Number of effective winter seasons (> 30 growing days) | 57 (79%) | 63 (81%) | 23 (96%) | 76 (84%) | 84 (93%) | 87 (97%) |
| Number of failed winter seasons (< 30 growing days) | 15 (21%) | 15 (19%) | 1 (4%) | 14 (16%) | 6 (7%) | 3 (3%) |
| Number of effective summer seasons (> 20 growing days) | 24 (34%) | 25 (32%) | 6 (26%) | 19 (21%) | 21 (24%) | 12 (13%) |
| Number of failed summer seasons (< 20 growing days) | 47 (66%) | 52 (68%) | 17 (74%) | 70 (79%) | 68 (76%) | 77 (87%) |

## Climate and pastoral management

Consideration of climatic factors is necessary as a basis for management decisions with regard to both animal husbandry and land management. For example, to achieve maximum lambing percentages the lamb drop should coincide with the time of the year in which new growth is most likely to be available which is during the month of July in this survey area.

One certain aspect of the climate in the survey area is drought. Droughts are a feature of the pastoral environment and management practices should be developed to minimise their impact.

There have been more years of below average rainfall and relatively few really good years. Low rainfall years will have a serious effect on stock numbers and production but they must be expected and provision must be made for them through sound financial and property management (Jennings 1972). Retaining high stock numbers during dry times has often led to a decline in the resource base affecting future productivity. However, management decisions such as selling off and culling to maintain a high quality nucleus flock structure will maintain or improve animal productivity and preserve the productivity of the rangelands (Curry *et al.* 1994).

Information on range condition indicates how the drought durability of a station has been affected. Range condition relates to the composition and abundance of palatable perennial shrubs and grasses, so it is most relevant during prolonged dry times when there is very little or no annual forage and grazing pressure is concentrated on perennial plants. Perennial plants are already under stress from very low soil moisture. Some plants drop their leaves and become dormant, those that try to maintain foliage are prone to damage from overgrazing. During prolonged dry times destocking or substantially reducing total grazing pressure (including goats and kangaroos) will prevent or minimise degradation.

Perennial vegetation can also be degraded with the break of season following a poor season if ground feed is sparse. Perennial shrubs are stressed, but pick up after rain, producing new growth in an effort to restore their vigour. If they are grazed heavily at this time, they may not survive. However deferment of grazing immediately after the break of the season will enhance the chance of recovery of perennial shrubs.

The country cannot improve without soil moisture to promote seed germination and plant growth. Thus destocking a paddock over a poor season may prevent degradation, but is unlikely to promote an improvement until good seasons return. Substantial improvements in the condition of the land usually require a sequence of good seasons (Pringle 1994).

During good seasons (and assuming a healthy soil) there is usually not very much grazing pressure on perennial shrubs as a whole. Species which are particularly palatable may be grazed, but generally stock prefer the ground feed. Some seedlings of perennial species in the ground feed may be grazed. The critical time arises when the short-lived species begin to wilt and perennial recruits become relatively more conspicuous and attractive to stock and other animals such as goats and kangaroos. It is then that a reduction in total grazing pressure is most likely to be effective.

Recent seasonal conditions will largely determine the amount of annual forage available and the general vigour of perennial shrubs and grasses. Considering this, together with predictions for the next season based on historical rainfall records, will guide management decisions on how many and what type of stock to put into particular paddocks, and numbers for selling and culling.

The following information is from the report on pastoral management in the adjacent area of the north-eastern Goldfields (Pringle 1994), and is also relevant to this survey area.

**Following a successful winter, chances are that the summer will be disappointing.**

This scenario is the most common; fair to good winters and, more often than not, poor summers. In these circumstances, stock numbers should be set on the basis that ground feed is going to be in short supply for much of the summer, once the weather warms up.

Monitoring of perennial shrub vigour and perhaps the extent to which animals hang on watering points should give a reasonable warning if the country is beginning to struggle with existing total grazing pressure.

**Following a good summer, chances are that the good run will last through winter.**

Pasture growth from summer rainfall can be considered an unusual bonus rather than something to rely on. However when it does occur it presents one of the best opportunities for improvement in the health of the land. All of the perennial plants that germinated during the summer face a reasonable chance of lasting the winter and facing the next summer with a year's growth behind them. Spelling in these circumstances is likely to enhance recruitment of palatable perennial shrubs.

This situation also allows for the build-up of stock numbers if they have been well below the long-term capacity of the land. Care should be taken in monitoring the land so that improvement in animal production is in balance with improvements in range condition – a balance between 'cashing in' on the season and 'putting some away' (protecting new recruits) for the next, inevitable, poor season.

**Following a failed winter it is unlikely that there will be a good summer.**

The failure of a winter is particularly serious because the next break of season is probably more than eight months away (next winter) as there is only a low probability of the summer being effective. Furthermore, grazing pressure on shrubs will increase as the weather becomes hotter and drier, and stock may tend to hang on waters and degrade the surrounding country. August and September will require decisions on selling excess stock, and where to retain stock over the next summer on existing forage reserves.

The outlook after a failed winter is very gloomy and total grazing pressure should be reduced accordingly. Failure to do so is likely to result in degradation and poor stock performance. This is a good time to screen herds or flocks and get rid of poorer animals.

**Following a failed summer, chances are that winter will see some improvement.**

This is not an unusual situation, most summers are poor and ground feed is usually patchy and short-lived. Some confidence in a reasonable winter is warranted, however, by early to mid June stocking levels may need to be reduced if the season has not broken. The key in this situation is to keep a close eye on both the condition of the country and perhaps the behaviour of animals, particularly whether they tend to hang on the watering point.

Throughout the survey area, the modal (or most commonly occurring) year consists of an effective winter season followed by a failed summer season. Recommended carrying capacities provided in this report are for this situation, referred to as a 'normal year', to be carried over summer.

# Chapter 4

# Pastoral enterprises and current pastoral management

The survey area includes the whole or part of 66 pastoral leases. The leases were all based on wool production, although some also carry small numbers of cattle. Merinos are the favoured breed of sheep. Two of the leases, Mt Elvire and Burnerbinmah, have been purchased by the Department of Conservation and Land Management, and have been destocked. Some of the leases have been purchased by mining companies and Aboriginal groups, but all of these leases are still stocked.

The average size of pastoral leases in this survey area is around 131,000 hectares (ha); however individual property size varies greatly between about 12,000 ha and nearly 300,000 ha. The stations run between 700 and 22,000 dry sheep equivalents (dse) with the long-term average for all stations being about 6500 dse.

In 1993, there were 322 pastoral leases supporting wool growing enterprises in Western Australia, of which 64 occur in this survey area. The Pastoral Wool Industry Task Force (1993) reported that the pastoral wool industry is suffering from a problem of low wool prices; at current prices virtually no wool pastoral property in Western Australia is able to generate a positive cash income. There has been some improvement in the pastoral wool industry since the task force report, however this could be short-term.

Pastoralists have responded to this crisis by cutting expenditure and drawing on off-station assets and sources of income. Traditionally, pastoral leases were run with the help of jackeroos and jillaroos, however, now they are most often run by the family alone. Many lessees have postponed repairs and maintenance to a level which is unsustainable. Many fences, which are up to 80 years old, need to be replaced. Pastoralists and their families have also increasingly sought employment in the mining industry to supplement station incomes.

The pastoral wool industry is based on a low level of input costs, with most of the effort involving maintenance of fences and watering points. Shearing is a very busy time, additional labour is required initially for mustering, then contract shearers are employed. Mustering may take up to six weeks with another six weeks for shearing. Shearing is usually done in early summer (November-December) or in autumn (March-April). Some stations in the southern areas tend to shear towards December/January, especially when winter seasons are prolonged and the vegetation and/or surface water is sufficient so stock do not need to water at watering points until summer really takes effect.

Lamb marking is done at shearing in many cases. This involves tail docking and castration. Crutching or mulesing may also be undertaken at shearing time. In some years losses from fly strike can be quite significant, both in value of wool lost and also in sheep deaths.

Mustering is most often done by trapping at watering points, and indeed, some areas such as the densely vegetated sandplain in the south and west could not be mustered by any other means. Trapping is done either by turning off the water supply and forcing stock to stay around the watering point or by the use of self-mustering systems. Self-mustering systems are more efficient than just trapping. Stock become used to entering and leaving watering points through a trap gate. When the stock need to be held the exit gates are locked. Some properties use aerial mustering, however very few aircraft are owned in the area and aerial mustering is generally done by contractors.

Most of the pastoral leases are fully developed, with fenced paddocks and many watering points. Paddocks are usually rectangular with fences aligned north-south and east-west, with tracks usually following the fence lines. Paddocks are generally 5 to 10 km long and wide, with two to four watering points. The watering points are often in the corners or along fence lines. This placement of watering points saves on the number of bores or wells required, however may lead to over-utilisation of pastures close to the watering point and under-utilisation of pastures in the centre of paddocks (beyond the grazing radius around the watering point). Redistributing watering points, for example by piping water towards the centre of the paddock, will encourage more even distribution of grazing in the paddock.

Stock are distributed across the pastoral lease according to their class; ewes, lambs and weaners are placed in the most productive country with wethers on the least productive country. Rams are usually kept in smaller paddocks nearer the homestead until they are allowed to run with the ewes, usually in early summer. Rams are purchased from studs and represent a significant proportion of the running costs of the enterprise. Stock are not usually shifted between annual shearings.

Following shearing, pastoralists decide which stock to keep, and which to sell or cull. If sheep are sold between annual shearings, they are often shorn, largely to comply with restrictions regarding the spread of lice and weeds.

Lambing is usually planned for winter, to make the most of ephemeral forage. Occasionally lambs are born in late spring or summer, but they are most often mis-mothered.

Summer is a critical time for pastoralists, as ground feed is generally sparse, the weather is hot and dry, and stock rely on watering points for survival. The mill run must

be completed regularly, as sheep will not live longer than three or four days without water in hot conditions.

There are three Land Conservation Districts in the survey area; Yalgoo, Mt Magnet and Sandstone. In addition a small number of stations are in the Murchison and Wiluna Land Conservation Districts. Pasture management workshops focussing on stocking rates were held by the Sandstone Land Conservation District Committee (LCDC) at Lake Mason station in April 1994 (Pringle and Riches 1996) and by the Yalgoo LCDC at Wagga Wagga station in November 1996. The Yalgoo LCDC has conducted some innovative workshops and field days. The size of the pastoral leases in the survey area has changed little over time so it is important to increase productivity. Roderick O'Connor (pers. comm.) believes a number of pastoralists are very conscious of the need to improve productivity, as reflected by the organisation of sheep field days concentrating on ram selection.

There is a feral goat eradication program which covers the stations in the survey area and many stations conduct annual trapping musters.

The book 'Mulgas, merinos and managers', published by the North-Eastern Goldfields and Kalgoorlie Land Conservation District Committees in 1993, is an excellent reference for pastoral managers throughout the pastoral wool growing areas.

# Chapter 5

# Individual station reports

Station reports are presented in alphabetical order. The survey covered all of 55 stations and parts of 11 stations. Eight of the stations that were only partly covered by this survey were previously surveyed during the Murchison or north-eastern Goldfields surveys. A report is provided for the whole of these stations combining the information from the two surveys. For the remaining three stations which were only partly covered only the part covered by this survey has been reported on.

Each station report consists of preliminary information including the Land Conservation District and Shire in which the station falls. The area included within each station is that which was legally defined as part of the pastoral lease(s) comprising each station at the time of the survey. The area does not include reserves, freehold land and vacant Crown land within the pastoral lease unless the station has grazing rights over a reserve in which case the reserve's land system area and traverse points are included in the detailed breakdowns for that station. The station area calculated from the digitised mapping is more accurate than the current stated legal area.

The first table deals with land types, i.e. groups of similar land systems. It gives a general impression of the types of country and their extent on each station. Seventy-six land systems in 20 land types were identified and mapped in the survey area. They are shown on the station plans and have been grouped into land types on the legend.

The second table provides more detailed information at a land system scale. For each land system (sorted into groups according to pastoral potential), there is information on its area, how much has been mapped as severely degraded and eroded (sde), how many traverse assessments were made on it, and what its condition was, based on these traverse assessments.

The suggested carrying capacity (scc) according to its current condition and the potential carrying capacity (pcc), assuming all land (including severely degraded and eroded areas if any) is in good condition, are given for each land system. The suggested figures are for a 'normal year' (i.e. a fair winter followed by a poor summer), to be carried over summer. The figures assume all feral animals and kangaroos are under control.

The carrying capacities are given in dry sheep equivalents (dse). These can be converted to different types and classes of stock using the conversion rates in Table 7. Table 7 also provides conversion rates for goats and kangaroos so that these other grazers can also be considered.

**Table 7. Relative feed requirements expressed as dry sheep equivalents (dse)**

| | | |
|---|---|---|
| **Sheep** | | |
| 1 wether (~ 45 kg) | = | 1.0 dse |
| 1 ewe (average for ewes producing 50 % lambs) | = | 1.3 dse |
| 1 weaner (to 1 year old) | = | 0.7 dse |
| 1 ram | = | 1.5 dse |
| **Cattle** | | |
| 1 steer (~ 270 kg) | = | 7.0 dse |
| 1 cow (average for cows producing 50 % calves) | = | 9.8 dse |
| 1 one year old steer or heifer (~ 140 kg) | = | 5.6 dse |
| 1 weaner | = | 4.2 dse |
| 1 bull | = | 10.5 dse |
| **Other grazers** | | |
| 1 goat | = | 1.0 dse |
| 1 kangaroo | = | 0.6 dse |

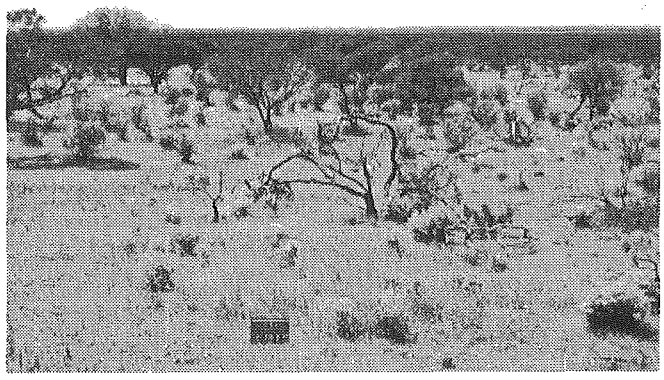
The severely degraded and eroded areas (sde) are given a carrying capacity of nil when calculating the suggested carrying capacity (scc). These areas are shown on the station plans. Areas of lake bed have been extracted from the Carnegie land system (of which they are a part) and have been given a carrying capacity of nil.

The carrying capacities are based on the condition of the perennial vegetation. The vegetation condition classes are defined as:

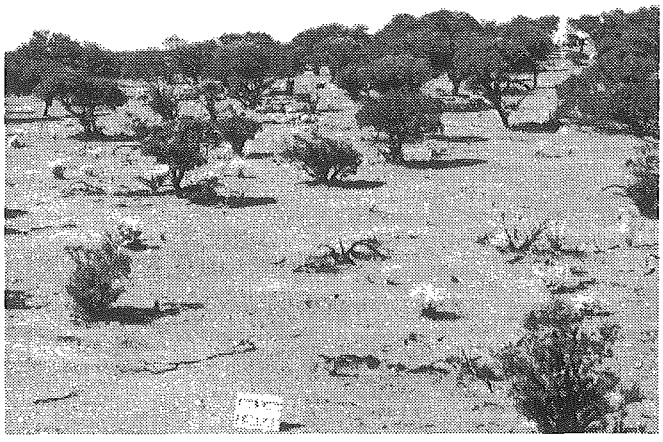
**Good** for the land unit-vegetation type, the site's cover and composition of shrubs, perennial herbs and grasses is near optimal, free of obvious reductions in palatable species or increases in unpalatable species. Perennials present include all or most of the palatable species expected; some less palatable or unpalatable species may have increased; but total perennial cover is not very different from the optimal.

**Fair** moderate losses of palatable perennials and/or increases in unpalatable shrubs or grasses, but most palatable species and stability desirables still present; foliar cover is less than on comparable sites rated as good unless unpalatable species have increased.

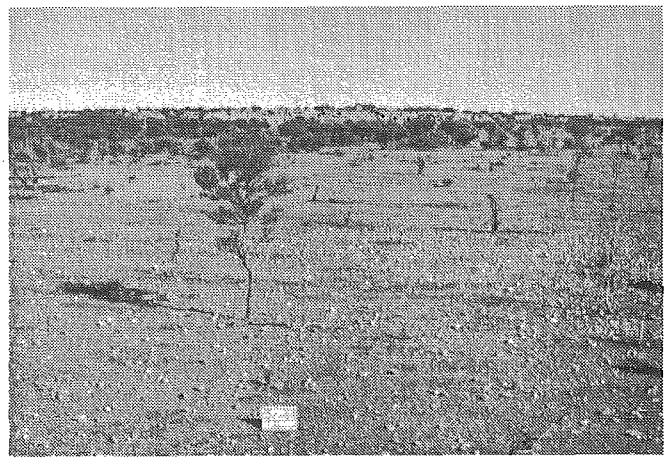
**Poor** conspicuous losses of palatable perennials or few, if any, palatable perennials remain, foliar cover is either decreased through a general loss of perennials or is increased by invasion of unpalatable species.



*In good range condition the sandy granitic acacia shrubland habitat (in habitat group B) supports a good density of palatable shrubs including Wilcox bush, warty-leaf eremophila, flat-leaf bluebush, tall saltbush and tall sida. Ground feed is abundant in fair seasons or better.*



*In fair condition there are fewer palatable shrubs, perhaps consisting of less sensitive species such as cotton bush.*



*In poor condition, none or only very few palatable shrubs remain and increasers such as desert cassia or needle bush may have invaded (not pictured here). Where a heavy mantle of stones does not protect soils, soil erosion is common.*

Carrying capacities were derived following stocking rate workshops held with the Sandstone and Yalgoo Land Conservation District Committees. Results from the workshops were compared to opinions of experienced rangeland advisers and the results from grazing trials held at Yerilla (Fletcher 1995), Coodardy (Yan *et al.* 1996) and Boolathana (Holm 1994). There was general agreement between these three sources of information. Table 8 shows the suggested carrying capacity for each of the land systems in good, fair and poor condition. Land systems have been grouped according to pastoral potential.

In some cases there are differences in the carrying capacities used here and in previously published carrying capacities for the same land system in the Murchison survey (Curry *et al.* 1994) and the north-eastern Goldfields survey (Pringle *et al.* 1994). This has occurred for three main reasons. In some cases the descriptions, and in particular the proportion of land units and their habitats, for the same land system have changed for this survey area to reflect regional differences, hence pastoral potential may differ. Also, in the adjoining Murchison survey there was no category of 1:16 ha/dse. Systems near this rating were placed into either the 1:12 ha/dse or the 1:20 ha/dse categories. With a greater number of categories in this survey, these systems have been placed in the 1:16 ha/dse category. Finally, following the stocking rate workshops held with local Land Conservation District Committees it was decided that the carrying capacity for hardpan plain habitats is closer to 1:16 ha/dse than 1:20 ha/dse. Systems with a major component of hardpan plains, such as Jundee and Woodline, were rated at 1:16 ha/dse rather than 1:20 ha/dse as previously.

Five stations include small areas of cleared land within their pastoral lease boundary. This land has been rated with a carrying capacity of 3 dse/ha, for both potential and suggested carrying capacity. This rating assumes that the land is cultivated, fertilised and sown, for example to oats or pasture.

The third table is a summary of the second table. Information is presented for land systems grouped according to pastoral potential.

Finally, summary range condition information for the station as a whole is presented. This includes the amount of severely degraded and eroded land mapped out on the station, the proportion of traverse assessments in good, fair and poor condition, and the suggested and potential carrying capacities of the station.

Throughout the station reports the figures have been rounded so there may be slight discrepancies due to this.

Forage availability (and hence carrying capacity and potential animal production) varies substantially during years and between years (Holm 1994). This variability makes a single recommendation about carrying capacity rather meaningless and perhaps misleading to both land managers and administrators.

The potential and suggested carrying capacity figures presented in the station reports apply to the situation where a 'fair' (modal) winter has just passed and a poor (modal) summer is expected in the next season. Given that this specific situation is the most usual, the suggested carrying capacities represent a reasonable approximation of long-term sustainable carrying capacity. On an annual basis however, an optimal carrying capacity may be substantially higher or lower than the scc, reflecting the variability in seasons experienced in the area. There is no requirement for these figures to be rigidly applied by managers.

**For the reasons stated above, it is inappropriate for the carrying capacity figures to be used alone for commercial or regulatory purposes.**

**Table 8. Pastoral potential of land systems in the Sandstone-Yalgoo-Paynes Find area**

| Pastoral potential | Good condition scc (ha/dse) | Fair condition scc (ha/dse) | Poor condition scc (ha/dse) | Land system |
|---|---|---|---|---|
| Very high | 5 | 8 | 14 | Merbla |
| High | 7 | 10 | 16 | Austin<br>Carnegie<br>Ero<br>Gumbreak<br>Joy<br>Mileura<br>Racecourse<br>Roderick<br>Steer<br>Yewin |
| Moderately high | 12 | 14 | 18 | Bunny<br>Campsite<br>Cunyu<br>Doney<br>Euchre<br>Gransal<br>Graves<br>Hootanui<br>Lawrence<br>Marlow<br>Monitor<br>Moriarty<br>Nallex<br>Nubev<br>Sherwood<br>Skipper<br>Tango<br>Tindalarra<br>Wilson<br>Wiluna<br>Yilgangi |
| Moderate | 16 | 18 | 20 | Ararak<br>Bandy<br>Challenge<br>Cosmo<br>Deadman<br>Desdemona<br>Felix<br>Hamilton<br>Illaara<br>Jundee<br>Melaleuca<br>Monk<br>Narryer<br>Olympic<br>Pindar<br>Rainbow<br>Ranch<br>Violet<br>Waguin<br>Windarra<br>Woodline<br>Yalluwin<br>Yanganoo |

**Table 8. Pastoral potential of land systems in the Sandstone-Yalgoo-Paynes Find area** — *continued*

| Pastoral potential | Good condition scc (ha/dse) | Fair condition scc (ha/dse) | Poor condition scc (ha/dse) | Land system |
|---|---|---|---|---|
| Low | 20 | 25 | 25 | Bannar<br>Bevon<br>Kalli<br>Gabanintha<br>Mulline<br>Naluthanna<br>Nerramyne<br>Norie<br>Singleton<br>Tealtoo<br>Teutonic<br>Yarrameedie<br>Yowie |
| Very low | 30 | 35 | 35 | Bullimore<br>Brooking<br>Dryandra<br>Marmion<br>Tallering<br>Tyrrell<br>Watson |
| Negligible | 50 | 50 | 50 | Joseph |

# ATLEY STATION

## PASTORAL LEASE 3114/873

**Area:** About 105,979 ha (legal); 106,237 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 569 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 307 | 0.3 |
| 4 | Breakaways and stony plains | 2 | 12,510 | 11.8 |
| 5 | Breakaways and chenopod plains | 1 | 3,181 | 3.0 |
| 6 | Granite plains and rises | 2 | 1,247 | 1.2 |
| 7 | Undulating acacia country | 1 | 66 | 0.1 |
| 8 | Chenopod plains and low rises | 2 | 6,069 | 5.7 |
| 9 | Stony non-chenopod plains | 1 | 957 | 0.9 |
| 10 | Spinifex sandplains | 3 | 24,045 | 22.6 |
| 12 | Acacia sandplains | 1 | 14,422 | 13.6 |
| 13 | Mulga hardpan plains | 2 | 1,642 | 1.5 |
| 14 | Mulga plains with some wanderrie | 2 | 37,831 | 35.6 |
| 16 | Sandy acacia plains witzh wanderrie | 1 | 3,858 | 3.6 |
| 18 | Calcreted old drainage systems | 1 | 103 | 0.1 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 5 | Gumbreak | 3,181 | 3.0 | 0 | 4 | 75 | 25 | 0 | 0 | 25 | 50 | 25 | 322 | 454 |
| Mod. high | 8 | Gransal | 4,035 | 3.8 | 0 | 11 | 64 | 27 | 9 | 0 | 0 | 27 | 73 | 241 | 336 |
| Mod. high | 8 | Nallex | 2,034 | 1.9 | 0 | 11 | 91 | 9 | 0 | 0 | 0 | 0 | 100 | 113 | 170 |
| Mod. high | 4 | Sherwood | 11,247 | 10.6 | 0 | 28 | 100 | 0 | 0 | 0 | 47 | 32 | 21 | 829 | 937 |
| Moderate | 6 | Bandy | 57 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 |
| Moderate | 6 | Challenge | 1,189 | 1.1 | 0 | 3 | 67 | 33 | 0 | 0 | 0 | 0 | 100 | 59 | 74 |
| Moderate | 13 | Hamilton | 176 | 0.2 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 11 | 11 |
| Moderate | 13 | Jundee | 1,466 | 1.4 | 0 | 4 | 75 | 25 | 0 | 0 | 50 | 0 | 50 | 82 | 92 |
| Moderate | 18 | Melaleuca | 103 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 |
| Moderate | 14 | Monk | 15,666 | 14.7 | 60 | 18 | 89 | 11 | 0 | 0 | 6 | 27 | 67 | 816 | 979 |
| Moderate | 7 | Violet | 66 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Moderate | 4 | Waguin | 1,263 | 1.2 | 0 | 5 | 100 | 0 | 0 | 0 | 80 | 0 | 20 | 76 | 79 |
| Moderate | 9 | Windarra | 957 | 0.9 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 52 | 60 |
| Moderate | 14 | Yanganoo | 22,166 | 20.9 | 0 | 32 | 97 | 3 | 0 | 0 | 13 | 19 | 68 | 1,168 | 1,385 |
| Low | 12 | Kalli | 14,422 | 13.6 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 676 | 721 |
| Low | 1 | Naluthanna | 241 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 12 |
| Low | 1 | Norie | 66 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Low | 16 | Yowie | 3,858 | 3.6 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 0 | 67 | 167 | 193 |
| Very low | 10 | Bullimore | 2,181 | 2.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 73 |
| Very low | 10 | Marmion | 6,593 | 6.2 | 0 | 7 | 100 | 0 | 0 | 0 | 71 | 29 | 0 | 211 | 220 |
| Very low | 10 | Tyrrell | 15,271 | 14.4 | 0 | 26 | 100 | 0 | 0 | 0 | 88 | 4 | 8 | 500 | 509 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) | Pcc (dse) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | (from table 2) | |
| High | 3,181 | 3.0 | 0 | 4 | 75 | 25 | 0 | 0 | 25 | 50 | 25 | 322 | 454 |
| Moderately high | 17,316 | 16.3 | 0 | 50 | 90 | 8 | 2 | 0 | 26 | 24 | 50 | 1,183 | 1,443 |
| Moderate | 43,108 | 40.6 | 60 | 64 | 92 | 8 | 0 | 0 | 19 | 17 | 64 | 2,277 | 2,694 |
| Low | 18,587 | 17.5 | 0 | 4 | 100 | 0 | 0 | 0 | 50 | 0 | 50 | 856 | 929 |
| Very low | 24,045 | 22.6 | 0 | 33 | 100 | 0 | 0 | 0 | 85 | 9 | 6 | 783 | 802 |
| **Total** | 106,237 | 100.0 | 60 | 155 | 93 | 6 | 1 | 0 | 36 | 18 | 46 | 5,421 | 6,322 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 46 | 21 | 33 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 60 (< 0.1% station) |
| Number of traverse points | 155 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 93 |
| % minor | 6 |
| % moderate | 1 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 36 |
| % fair | 18 |
| % poor | 46 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 5,420 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 6,320 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# BADJA STATION

## PASTORAL LEASE 3114/674

**Area:** About 113,653 ha (legal); 113,722 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease =†1,138†ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 3,546 | 3.1 |
| 2 | Hills with mixed shrublands | 1 | 4,142 | 3.6 |
| 3 | Hills with chenopods | 1 | 273 | 0.2 |
| 4 | Breakaways and stony plains | 3 | 7,526 | 6.6 |
| 5 | Breakaways and chenopod plains | 1 | 554 | 0.5 |
| 6 | Granite plains and rises | 2 | 8,421 | 7.4 |
| 7 | Undulating acacia country | 2 | 6,262 | 5.5 |
| 8 | Chenopod plains and low rises | 1 | 679 | 0.6 |
| 11 | Sandplains with dense mixed shrublands | 1 | 12,514 | 11.0 |
| 12 | Acacia sandplains | 1 | 22,388 | 19.7 |
| 13 | Mulga hardpan plains | 3 | 28,408 | 25.0 |
| 16 | Sandy acacia plains with wanderrie | 3 | 16,602 | 14.6 |
| 18 | Calcreted old drainage systems | 1 | 2,407 | 2.1 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 5 | Gumbreak | 554 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 79 |
| Mod. high | 18 | Cunyu | 2,407 | 2.1 | 0 | 6 | 100 | 0 | 0 | 0 | 0 | 33 | 67 | 146 | 201 |
| Mod. high | 4 | Euchre | 373 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 31 |
| Mod. high | 8 | Gransal | 679 | 0.6 | 0 | 2 | 50 | 0 | 50 | 0 | 0 | 0 | 100 | 38 | 57 |
| Mod. high | 3 | Graves | 273 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 23 |
| Mod. high | 4 | Sherwood | 5,284 | 4.6 | 0 | 7 | 100 | 0 | 0 | 0 | 29 | 57 | 14 | 384 | 440 |
| Mod. high | 13 | Tindalarra | 26,396 | 23.2 | 0 | 42 | 95 | 5 | 0 | 0 | 7 | 31 | 62 | 1,648 | 2,200 |
| Mod. high | 1 | Wiluna | 1,442 | 1.3 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 97 | 120 |
| Moderate | 6 | Bandy | 753 | 0.7 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 47 | 47 |
| Moderate | 6 | Challenge | 7,667 | 6.7 | 0 | 14 | 100 | 0 | 0 | 0 | 7 | 21 | 72 | 399 | 479 |
| Moderate | 16 | Illaara | 1,009 | 0.9 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 63 | 63 |
| Moderate | 13 | Jundee | 813 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 51 |
| Moderate | 13 | Rainbow | 1,200 | 1.1 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 72 | 75 |
| Moderate | 7 | Violet | 253 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 16 |
| Moderate | 4 | Waguin | 1,870 | 1.6 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 110 | 117 |
| Low | 12 | Kalli | 22,388 | 19.7 | 0 | 30 | 100 | 0 | 0 | 0 | 80 | 17 | 3 | 1,075 | 1,119 |
| Low | 7 | Nerramyne | 6,009 | 5.3 | 0 | 11 | 100 | 0 | 0 | 0 | 45 | 55 | 0 | 267 | 300 |
| Low | 16 | Tealtoo | 4,688 | 4.1 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 214 | 234 |
| Low | 16 | Yowie | 10,905 | 9.6 | 0 | 16 | 100 | 0 | 0 | 0 | 81 | 19 | 0 | 525 | 545 |
| Very low | 2 | Tallering | 4,142 | 3.6 | 0 | 4 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 133 | 138 |
| Very low | 1 | Watson | 2,103 | 1.8 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 65 | 70 |
| Negligible | 11 | Joseph | 12,514 | 11.0 | 0 | 20 | 100 | 0 | 0 | 0 | 60 | 40 | 0 | 250 | 250 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | Scc (dse) | Pcc (dse) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | (from table 2) | |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 554 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 79 |
| Moderately high | 36,853 | 32.4 | 0 | 58 | 95 | 3 | 2 | 0 | 10 | 33 | 57 | 2,363 | 3,071 |
| Moderate | 13,566 | 11.9 | 0 | 20 | 100 | 0 | 0 | 0 | 30 | 20 | 50 | 752 | 848 |
| Low | 43,990 | 38.7 | 0 | 59 | 100 | 0 | 0 | 0 | 74 | 24 | 2 | 2,080 | 2,200 |
| Very low | 6,245 | 5.5 | 0 | 6 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 198 | 208 |
| Negligible | 12,514 | 11.0 | 0 | 20 | 100 | 0 | 0 | 0 | 60 | 40 | 0 | 250 | 250 |
| **Total** | 113,722 | 100.0 | 0 | 163 | 98 | 1 | 1 | 0 | 44 | 29 | 27 | 5,701 | 6,656 |
| **Survey average for land systems on this station** | | | | | 95 | 3 | 1 | ^0 | 45 | 33 | 22 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0 % of station) |
| Number of traverse points | 163 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 98 |
| % minor | 1 |
| % moderate | 1 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 44 |
| % fair | 29 |
| % poor | 27 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 5,700 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 6,660 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# BARNONG STATION

## PASTORAL LEASE 3114/430 + GRAZING RIGHTS ON RESERVE 10067

**Area:** About 169,312 ha (legal); 169,556 ha (computed)

**Area surveyed:** 171,456 ha (whole station plus reserve 10067)

**Land Conservation District:** Yalgoo

**Shire(s):** Mullewa; Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 863 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 4 | 12,960 | 7.6 |
| 2 | Hills with mixed shrublands | 1 | 1,009 | 0.6 |
| 4 | Breakaways and stony plains | 1 | 1,278 | 0.7 |
| 5 | Breakaways and chenopod plains | 1 | 947 | 0.6 |
| 6 | Granite plains and rises | 2 | 25,725 | 15.0 |
| 7 | Undulating acacia country | 2 | 15,114 | 8.8 |
| 8 | Chenopod plains and low rises | 1 | 514 | 0.3 |
| 11 | Sandplains with dense mixed shrublands | 1 | 43,226 | 25.2 |
| 12 | Acacia sandplains | 1 | 12,073 | 7.0 |
| 13 | Mulga hardpan plains | 3 | 30,542 | 17.8 |
| 16 | Sandy acacia plains with wanderrie | 1 | 2,348 | 1.4 |
| 17 | Chenopod alluvial plains | 2 | 12,751 | 7.4 |
| 18 | Calcreted old drainage systems | 1 | 1,646 | 1.0 |
| 19 | Plains with eucalypt woodlands | 2 | 8,541 | 5.0 |
| 20 | Lake country | 1 | 2,782 | 1.6 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 2,655 | 1.5 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 325 | 379 |
| High | 17 | Ero | 4,828 | 2.8 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 491 | 690 |
| High | 18 | Mileura | 1,646 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 168 | 235 |
| High | 17 | Yewin | 7,923 | 4.6 | 0 | 17 | 100 | 0 | 0 | 0 | 88 | 6 | 6 | 1,073 | 1,132 |
| Mod. high | 19 | Doney | 227 | 0.1 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 19 |
| Mod. high | 4 | Euchre | 1,278 | 0.7 | 0 | 5 | 100 | 0 | 0 | 0 | 60 | 20 | 20 | 96 | 107 |
| Mod. high | 8 | Gransal | 514 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 43 |
| Mod. high | 13 | Tindalarra | 21,812 | 12.7 | 0 | 39 | 94 | 3 | 3 | 0 | 34 | 38 | 28 | 1,549 | 1,818 |
| Mod. high | 1 | Wiluna | 2,603 | 1.5 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 33 | 34 | 182 | 217 |
| Mod. high | 5 | Yilgangi | 947 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 79 |
| Moderate | 6 | Bandy | 3,076 | 1.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 185 | 192 |
| Moderate | 6 | Challenge | 22,649 | 13.2 | 0 | 18 | 100 | 0 | 0 | 0 | 78 | 22 | 0 | 1,273 | 1,416 |
| Moderate | 13 | Jundee | 5,020 | 2.9 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 287 | 314 |
| Moderate | 19 | Pindar | 8,313 | 4.8 | 0 | 9 | 100 | 0 | 0 | 0 | 78 | 22 | 0 | 507 | 520 |
| Moderate | 13 | Rainbow | 3,710 | 2.2 | 0 | 9 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 223 | 232 |
| Moderate | 7 | Violet | 4,450 | 2.6 | 0 | 4 | 100 | 0 | 0 | 0 | 25 | 50 | 25 | 249 | 278 |
| Low | 1 | Gabanintha | 8,647 | 5.0 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 0 | 33 | 374 | 432 |
| Low | 12 | Kalli | 12,073 | 7.0 | 0 | 4 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 566 | 604 |
| Low | 7 | Nerramyne | 10,665 | 6.2 | 0 | 8 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 484 | 533 |
| Low | 1 | Norie | 64 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Low | 16 | Yowie | 2,348 | 1.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 106 | 117 |
| Very low | 2 | Tallering | 1,009 | 0.6 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 29 | 34 |
| Very low | 1 | Watson | 1,645 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 55 |
| Negligible | 11 | Joseph | 43,226 | 25.2 | 0 | 28 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 865 | 865 |
| Nil | 20 | Lake bed | 127 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 17,052 | 10.0 | 0 | 21 | 100 | 0 | 0 | 0 | 90 | 5 | 5 | 2,057 | 2,436 |
| Moderately high | 27,381 | 16.0 | 0 | 47 | 96 | 2 | 2 | 0 | 36 | 36 | 28 | 1,950 | 2,282 |
| Moderate | 47,219 | 27.5 | 0 | 43 | 100 | 0 | 0 | 0 | 65 | 33 | 2 | 2,724 | 2,951 |
| Low | 33,797 | 19.7 | 0 | 15 | 100 | 0 | 0 | 0 | 53 | 40 | 7 | 1,533 | 1,690 |
| Very low | 2,654 | 1.5 | 0 | 1 | 100 | 0 | 0 | 0 | 50 | 25 | 25 | 78 | 88 |
| Negligible | 43,226 | 25.2 | 0 | 28 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 865 | 865 |
| Nil | 127 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 171,456 | 100.0 | 0 | 155 | 98 | 1 | 1 | 0 | 65 | 25 | 10 | 9,207 | 10,312 |
| **Survey average for land systems on this station** | | | | | 95 | 4 | 1 | ^0 | 47 | 34 | 19 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of area surveyed) |
| Number of traverse points | 155 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 98 |
| % minor | 1 |
| % moderate | 1 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 65 |
| % fair | 25 |
| % poor | 10 |
| ! Suggested carrying capacity (dse) over summer, following an effective winter season | 9,210 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 10,310 |

! The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# BARRAMBIE STATION

## PASTORAL LEASE 3114/1187

**Area:** About 100,564 ha (legal); 100,752 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 269 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 5 | 4,160 | 4.1 |
| 4 | Breakaways and stony plains | 2 | 11,726 | 11.6 |
| 5 | Breakaways and chenopod plains | 2 | 2,282 | 2.3 |
| 7 | Undulating acacia country | 1 | 1,827 | 1.8 |
| 9 | Stony non-chenopod plains | 2 | 1,058 | 1.1 |
| 10 | Spinifex sandplains | 1 | 61,995 | 61.5 |
| 12 | Acacia sandplains | 1 | 1,188 | 1.2 |
| 13 | Mulga hardpan plains | 3 | 4,425 | 4.4 |
| 14 | Mulga plains with some wanderrie | 1 | 11,517 | 11.4 |
| 15 | Chenopod washplains | 1 | 517 | 0.5 |
| 18 | Calcreted old drainage systems | 1 | 55 | 0.1 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 5 | Gumbreak | 1,133 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 162 |
| Mod. high | 5 | Hootanui | 1,150 | 1.1 | 0 | 7 | 72 | 14 | 14 | 0 | 0 | 29 | 71 | 69 | 96 |
| Mod. high | 4 | Sherwood | 9,137 | 9.1 | 0 | 21 | 95 | 5 | 0 | 0 | 76 | 10 | 14 | 715 | 761 |
| Mod. high | 15 | Tango | 517 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 43 |
| Mod. high | 1 | Wiluna | 1,253 | 1.2 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 104 | 104 |
| Moderate | 18 | Cosmo | 55 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Moderate | 13 | Jundee | 3,788 | 3.8 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 237 | 237 |
| Moderate | 13 | Rainbow | 27 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| Moderate | 7 | Violet | 1,827 | 1.8 | 0 | 5 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 114 | 114 |
| Moderate | 4 | Waguin | 2,589 | 2.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 153 | 162 |
| Moderate | 9 | Windarra | 49 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Moderate | 13 | Woodline | 611 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 38 |
| Moderate | 14 | Yanganoo | 11,517 | 11.4 | 0 | 23 | 100 | 0 | 0 | 0 | 91 | 9 | 0 | 713 | 720 |
| Low | 1 | Bevon | 920 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 46 |
| Low | 1 | Gabanintha | 1,376 | 1.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 69 |
| Low | 12 | Kalli | 1,188 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 59 |
| Low | 1 | Naluthanna | 302 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 15 |
| Low | 9 | Yarrameedie | 1,009 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 50 |
| Very low | 1 | Brooking | 309 | 0.3 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 10 | 10 |
| Very low | 10 | Bullimore | 61,995 | 61.5 | 0 | 10 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 2,034 | 2,067 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 1,133 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 162 |
| Moderately high | 12,056 | 12.0 | 0 | 30 | 90 | 7 | 3 | 0 | 60 | 13 | 27 | 924 | 1,005 |
| Moderate | 20,463 | 20.3 | 0 | 32 | 100 | 0 | 0 | 0 | 94 | 6 | 0 | 1,258 | 1,279 |
| Low | 4,795 | 4.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 211 | 240 |
| Very low | 62,305 | 61.8 | 0 | 11 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 2,044 | 2,077 |
| **Total** | 100,752 | 100.0 | 0 | 73 | 96 | 3 | 1 | 0 | 81 | 8 | 11 | 4,556 | 4,763 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 42 | 30 | 28 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 73 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 96 |
| % minor | 3 |
| % moderate | 1 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 81 |
| % fair | 8 |
| % poor | 11 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 4,560 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 4,760 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# BIMBIJY STATION

## PASTORAL LEASE 3114/718 + GRAZING RIGHTS ON LEASE 3116/10861

**Area:** About 87,723 ha (legal); 87,680 ha (computed)

**Area surveyed:** 88,200 ha (whole station plus lease 3116/10861)

**Land Conservation District:** Yalgoo

**Shire(s):** Mt Marshall

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 0 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 4 | Breakaways and stony plains | 2 | 13,368 | 15.2 |
| 6 | Granite plains and rises | 1 | 106 | 0.1 |
| 11 | Sandplains with dense mixed shrublands | 2 | 14,909 | 16.9 |
| 12 | Acacia sandplains | 1 | 605 | 0.7 |
| 16 | Sandy acacia plains with wanderrie | 1 | 35,302 | 40.0 |
| 19 | Plains with eucalypt woodlands | 1 | 4,930 | 5.6 |
| 20 | Lake country | 1 | 18,462 | 20.9 |
| | Cleared land | - | 520 | 0.6 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 17,946 | 20.3 | 0 | 12 | 100 | 0 | 0 | 0 | 83 | 17 | 0 | 2,197 | 2,564 |
| Mod. high | 19 | Doney | 4,930 | 5.6 | 0 | 16 | 100 | 0 | 0 | 0 | 6 | 69 | 25 | 336 | 411 |
| Mod. high | 4 | Euchre | 11,271 | 12.8 | 0 | 32 | 100 | 0 | 0 | 0 | 63 | 34 | 3 | 885 | 939 |
| Moderate | 6 | Bandy | 106 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 7 |
| Moderate | 4 | Olympic | 2,097 | 2.4 | 0 | 7 | 100 | 0 | 0 | 0 | 72 | 14 | 14 | 125 | 131 |
| Low | 11 | Bannar | 14,320 | 16.2 | 0 | 15 | 100 | 0 | 0 | 0 | 73 | 27 | 0 | 677 | 716 |
| Low | 12 | Kalli | 605 | 0.7 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 28 | 30 |
| Low | 16 | Yowie | 35,302 | 40.0 | 0 | 48 | 100 | 0 | 0 | 0 | 90 | 10 | 0 | 1,730 | 1,765 |
| Negligible | 11 | Joseph | 590 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 12 |
| Nil | 20 | Lake bed | 515 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cultivated land | | | 520 | 0.6 | | | | | | | | | | 1,560 | 1,560 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 17,946 | 20.3 | 0 | 12 | 100 | 0 | 0 | 0 | 83 | 17 | 0 | 2,197 | 2,564 |
| Moderately high | 16,221 | 18.4 | 0 | 48 | 100 | 0 | 0 | 0 | 44 | 46 | 10 | 1,221 | 1,350 |
| Moderate | 2,202 | 2.5 | 0 | 7 | 100 | 0 | 0 | 0 | 72 | 14 | 14 | 131 | 138 |
| Low | 50,726 | 56.9 | 0 | 66 | 100 | 0 | 0 | 0 | 85 | 15 | 0 | 2,435 | 2,511 |
| Negligible | 590 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 12 |
| Nil | 515 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cultivated land | 520 | 0.6 | | | | | | | | | | 1,560 | 1,560 |
| **Total** | 88,200 | 100.0 | 0 | 133 | 100 | 0 | 0 | 0 | 69 | 26 | 5 | 7,516 | 8,135 |
| **Survey average for land systems on this station** | | | | | 99 | 1 | ^0 | ^0 | 65 | 26 | 9 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of area surveyed) |
| Number of traverse points | 133 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 100 |
| % minor | 0 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 69 |
| % fair | 26 |
| % poor | 5 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 7,520 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 8,140 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# BLACK HILL STATION

## PASTORAL LEASE 3114/1031

**Area:** About 145,395 ha (legal); 145,511 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 516 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 5 | 20,582 | 14.1 |
| 4 | Breakaways and stony plains | 2 | 15,829 | 10.9 |
| 5 | Breakaways and chenopod plains | 2 | 4,066 | 2.8 |
| 7 | Undulating acacia country | 2 | 18,035 | 12.4 |
| 8 | Chenopod plains and low rises | 2 | 2,424 | 1.7 |
| 9 | Stony non-chenopod plains | 1 | 1,814 | 1.2 |
| 10 | Spinifex sandplains | 1 | 34,444 | 23.7 |
| 12 | Acacia sandplains | 1 | 6,635 | 4.6 |
| 13 | Mulga hardpan plains | 4 | 26,407 | 18.1 |
| 14 | Mulga plains with some wanderrie | 2 | 13,697 | 9.4 |
| 15 | Chenopod washplains | 1 | 792 | 0.5 |
| 16 | Sandy acacia plains with wanderrie | 1 | 786 | 0.5 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 5 | Gumbreak | 3,904 | 2.7 | 0 | 5 | 80 | 20 | 0 | 0 | 0 | 0 | 100 | 244 | 558 |
| Mod. high | 8 | Gransal | 1,933 | 1.3 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 33 | 34 | 133 | 161 |
| Mod. high | 5 | Hootanui | 162 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 14 |
| Mod. high | 15 | Monitor | 792 | 0.5 | 210 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 66 |
| Mod. high | 8 | Nallex | 491 | 0.3 | 0 | 1 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 27 | 41 |
| Mod. high | 7 | Nubev | 2,397 | 1.6 | 0 | 5 | 100 | 0 | 0 | 0 | 0 | 60 | 40 | 156 | 200 |
| Mod. high | 4 | Sherwood | 14,798 | 10.2 | 0 | 11 | 100 | 0 | 0 | 0 | 0 | 27 | 73 | 1,069 | 1,233 |
| Mod. high | 1 | Wiluna | 14,048 | 9.7 | 0 | 21 | 95 | 5 | 0 | 0 | 19 | 33 | 48 | 928 | 1,171 |
| Moderate | 16 | Desdemona | 786 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 49 |
| Moderate | 13 | Hamilton | 608 | 0.4 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 30 | 38 |
| Moderate | 13 | Jundee | 10,165 | 7.0 | 18 | 10 | 100 | 0 | 0 | 0 | 30 | 40 | 30 | 568 | 635 |
| Moderate | 14 | Monk | 4,559 | 3.1 | 0 | 9 | 100 | 0 | 0 | 0 | 0 | 22 | 78 | 234 | 285 |
| Moderate | 7 | Violet | 15,638 | 10.7 | 0 | 16 | 100 | 0 | 0 | 0 | 13 | 50 | 37 | 851 | 977 |
| Moderate | 4 | Waguin | 1,031 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 64 |
| Moderate | 9 | Windarra | 1,814 | 1.2 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 0 | 33 | 106 | 113 |
| Moderate | 13 | Woodline | 12,548 | 8.6 | 0 | 10 | 100 | 0 | 0 | 0 | 30 | 20 | 50 | 698 | 784 |
| Moderate | 13 | Yalluwin | 3,086 | 2.1 | 0 | 7 | 100 | 0 | 0 | 0 | 29 | 42 | 29 | 173 | 193 |
| Moderate | 14 | Yanganoo | 9,139 | 6.3 | 0 | 10 | 100 | 0 | 0 | 0 | 30 | 30 | 40 | 506 | 571 |
| Low | 1 | Bevon | 4,186 | 2.9 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 186 | 209 |
| Low | 1 | Gabanintha | 317 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 16 |
| Low | 12 | Kalli | 6,635 | 4.6 | 0 | 5 | 100 | 0 | 0 | 0 | 40 | 40 | 20 | 292 | 332 |
| Low | 1 | Norie | 853 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 43 |
| Very low | 1 | Brooking | 1,178 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 39 |
| Very low | 10 | Bullimore | 34,444 | 23.7 | 0 | 29 | 100 | 0 | 0 | 0 | 97 | 0 | 3 | 1,143 | 1,148 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) | Pcc (dse) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | (from table 2) | |
| High | 3,904 | 2.7 | 0 | 5 | 80 | 20 | 0 | 0 | 0 | 0 | 100 | 244 | 558 |
| Moderately high | 34,621 | 23.8 | 210 | 41 | 95 | 5 | 0 | 0 | 12 | 34 | 54 | 2,370 | 2,885 |
| Moderate | 59,374 | 40.8 | 0 | 66 | 100 | 0 | 0 | 0 | 23 | 33 | 44 | 3,268 | 3,711 |
| Low | 11,990 | 8.2 | 18 | 6 | 100 | 0 | 0 | 0 | 33 | 50 | 17 | 531 | 600 |
| Very low | 35,622 | 24.5 | 0 | 29 | 100 | 0 | 0 | 0 | 97 | 0 | 3 | 1,180 | 1,187 |
| **Total** | 145,511 | 100.0 | 228 | 147 | 98 | 2 | 0 | 0 | 34 | 27 | 39 | 7,593 | 8,941 |
| **Survey average for land systems on this station** | | | | | 95 | 4 | 1 | ^0 | 39 | 29 | 32 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 228 (0.2% of station) |
| Number of traverse points | 147 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 98 |
| % minor | 2 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 34 |
| % fair | 27 |
| % poor | 39 |
| ! Suggested carrying capacity (dse) over summer, following an effective winter season | 7,590 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 8,940 |

! The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# BLACK RANGE STATION

## PASTORAL LEASE 3114/428

**Area:** About 79,329 ha (legal); 79,511 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 62 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 4 | Breakaways and stony plains | 2 | 3,472 | 4.4 |
| 5 | Breakaways and chenopod plains | 1 | 145 | 0.2 |
| 7 | Undulating acacia country | 1 | 47 | 0.1 |
| 10 | Spinifex sandplains | 1 | 65,034 | 81.8 |
| 12 | Acacia sandplains | 1 | 309 | 0.4 |
| 13 | Mulga hardpan plains | 1 | 861 | 1.1 |
| 14 | Mulga plains with some wanderrie | 1 | 8,760 | 11.0 |
| 18 | Calcreted old drainage systems | 3 | 883 | 1.1 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 5 | Gumbreak | 145 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 21 |
| Mod. high | 18 | Cunyu | 376 | 0.5 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 21 | 31 |
| Mod. high | 4 | Sherwood | 2,457 | 3.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 178 | 205 |
| Moderate | 18 | Cosmo | 152 | 0.2 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 0 | 33 | 9 | 10 |
| Moderate | 13 | Jundee | 861 | 1.1 | 46 | 3 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 41 | 54 |
| Moderate | 18 | Melaleuca | 355 | 0.4 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 33 | 34 | 20 | 22 |
| Moderate | 7 | Violet | 47 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Moderate | 4 | Waguin | 1,015 | 1.3 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 67 | 0 | 59 | 63 |
| Moderate | 14 | Yanganoo | 8,760 | 11.0 | 0 | 24 | 100 | 0 | 0 | 0 | 25 | 21 | 54 | 476 | 548 |
| Low | 12 | Kalli | 309 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 15 |
| Very low | 10 | Bullimore | 65,034 | 81.8 | 0 | 22 | 100 | 0 | 0 | 0 | 95 | 0 | 5 | 2,152 | 2,168 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) | Pcc (dse) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | (from table 2) | |
| High | 145 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 21 |
| Moderately high | 2,833 | 3.5 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 199 | 236 |
| Moderate | 11,190 | 14.1 | 0 | 36 | 100 | 0 | 0 | 0 | 28 | 22 | 50 | 607 | 699 |
| Low | 309 | 0.4 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 15 |
| Very low | 65,034 | 81.8 | 0 | 22 | 100 | 0 | 0 | 0 | 95 | 0 | 5 | 2,152 | 2,168 |
| **Total** | 79,511 | 100.0 | 46 | 60 | 100 | 0 | 0 | 0 | 52 | 13 | 35 | 2,987 | 3,139 |
| **Survey average for land systems on this station** | | | | | 95 | 3 | 1 | ^0 | 49 | 25 | 26 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 46 (< 0.1% of station) |
| Number of traverse points | 60 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 100 |
| % minor | 0 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 52 |
| % fair | 13 |
| % poor | 35 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 2,990 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 3,140 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# BOOYLGOO SPRING STATION

## PASTORAL LEASE 3114/790

**Area:** About 40,650 ha (legal); 40,701 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 88 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 3 | 8,842 | 21.7 |
| 4 | Breakaways and stony plains | 1 | 6,084 | 14.9 |
| 6 | Granite plains and rises | 1 | 19 | ^0.0 |
| 8 | Chenopod plains and low rises | 1 | 464 | 1.1 |
| 9 | Stony non-chenopod plains | 2 | 2,303 | 5.7 |
| 10 | Spinifex sandplains | 1 | 10,514 | 25.8 |
| 12 | Acacia sandplains | 1 | 470 | 1.2 |
| 13 | Mulga hardpan plains | 1 | 2,791 | 6.9 |
| 14 | Mulga plains with some wanderrie | 2 | 8,749 | 21.5 |
| 15 | Chenopod washplains | 1 | 144 | 0.4 |
| 18 | Calcreted old drainage systems | 2 | 316 | 0.8 |
| 20 | Lake country | 1 | 4 | ^0.0 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 4 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| High | 18 | Mileura | 42 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 |
| Mod. high | 18 | Cunyu | 275 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 23 |
| Mod. high | 8 | Gransal | 464 | 1.1 | 152 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 39 |
| Mod. high | 15 | Monitor | 144 | 0.4 | 144 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 12 |
| Mod. high | 4 | Sherwood | 6,084 | 14.9 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 25 | 75 | 440 | 507 |
| Moderate | 6 | Challenge | 19 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Moderate | 13 | Jundee | 2,791 | 6.9 | 0 | 6 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 140 | 174 |
| Moderate | 14 | Monk | 6,914 | 17.0 | 0 | 12 | 100 | 0 | 0 | 0 | 0 | 25 | 75 | 355 | 432 |
| Moderate | 9 | Windarra | 844 | 2.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 53 |
| Moderate | 14 | Yanganoo | 1,835 | 4.5 | 0 | 2 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 101 | 115 |
| Low | 1 | Gabanintha | 5,183 | 12.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 224 | 259 |
| Low | 12 | Kalli | 470 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 24 |
| Low | 1 | Norie | 394 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 20 |
| Low | 9 | Yarrameedie | 1,459 | 3.6 | 0 | 13 | 84 | 8 | 8 | 0 | 0 | 31 | 69 | 58 | 73 |
| Very low | 1 | Brooking | 3,265 | 8.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 | 109 |
| Very low | 10 | Bullimore | 10,514 | 25.8 | 0 | 5 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 350 | 350 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 46 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 7 |
| Moderately high | 6,966 | 17.1 | 296 | 4 | 100 | 0 | 0 | 0 | 0 | 25 | 75 | 497 | 581 |
| Moderate | 12,403 | 30.5 | 0 | 20 | 95 | 5 | 0 | 0 | 0 | 15 | 85 | 643 | 775 |
| Low | 7,507 | 18.4 | 0 | 13 | 84 | 8 | 8 | 0 | 0 | 31 | 69 | 322 | 375 |
| Very low | 13,779 | 33.9 | 0 | 5 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 453 | 459 |
| **Total** | 40,701 | 100.0 | 296 | 42 | 93 | 5 | 2 | 0 | 12 | 19 | 69 | 1,919 | 2,197 |
| **Survey average for land systems on this station** | | | | | 94 | 4 | 1 | 1 | 45 | 30 | 25 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 296 (0.7% of station) |
| Number of traverse points | 42 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 93 |
| % minor | 5 |
| % moderate | 2 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 12 |
| % fair | 19 |
| % poor | 69 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 1,920 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 2,200 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# BULGA DOWNS STATION

## PASTORAL LEASE 3114/939

**Area:** About 218,270 ha (legal); 217,139 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Menzies; Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 0 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 4 | 9,251 | 4.3 |
| 4 | Breakaways and stony plains | 2 | 13,937 | 6.4 |
| 5 | Breakaways and chenopod plains | 1 | 1,223 | 0.6 |
| 6 | Granite plains and rises | 2 | 9,654 | 4.4 |
| 7 | Undulating acacia country | 1 | 3,704 | 1.7 |
| 8 | Chenopod plains and low rises | 1 | 2,728 | 1.3 |
| 9 | Stony non-chenopod plains | 2 | 1,345 | 0.6 |
| 10 | Spinifex sandplains | 2 | 128,106 | 59.0 |
| 12 | Acacia sandplains | 1 | 2,649 | 1.2 |
| 13 | Mulga hardpan plains | 2 | 3,811 | 1.8 |
| 14 | Mulga plains with some wanderrie | 2 | 18,019 | 8.3 |
| 16 | Sandy acacia plains with wanderrie | 2 | 13,830 | 6.4 |
| 18 | Calcreted old drainage systems | 1 | 757 | 0.3 |
| 19 | Plains with eucalypt woodlands | 1 | 361 | 0.2 |
| 20 | Lake country | 1 | 7,764 | 3.6 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 7,693 | 3.5 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 942 | 1,099 |
| High | 5 | Gumbreak | 1,223 | 0.6 | 0 | 2 | 50 | 50 | 0 | 0 | 50 | 50 | 0 | 149 | 175 |
| Mod. high | 8 | Gransal | 2,728 | 1.3 | 0 | 7 | 100 | 0 | 0 | 0 | 57 | 43 | 0 | 213 | 227 |
| Mod. high | 4 | Sherwood | 10,176 | 4.7 | 0 | 15 | 100 | 0 | 0 | 0 | 40 | 13 | 47 | 699 | 848 |
| Moderate | 16 | Ararak | 1,325 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 83 |
| Moderate | 6 | Bandy | 2,389 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 143 | 149 |
| Moderate | 6 | Challenge | 7,266 | 3.3 | 0 | 10 | 90 | 10 | 0 | 0 | 30 | 20 | 50 | 399 | 454 |
| Moderate | 19 | Deadman | 361 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 23 |
| Moderate | 13 | Jundee | 1,260 | 0.6 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 79 | 79 |
| Moderate | 18 | Melaleuca | 757 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 47 |
| Moderate | 14 | Monk | 12,064 | 5.6 | 0 | 18 | 100 | 0 | 0 | 0 | 17 | 39 | 44 | 655 | 754 |
| Moderate | 13 | Rainbow | 2,551 | 1.2 | 0 | 9 | 100 | 0 | 0 | 0 | 67 | 22 | 11 | 152 | 159 |
| Moderate | 7 | Violet | 3,704 | 1.7 | 0 | 6 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 223 | 232 |
| Moderate | 4 | Waguin | 3,761 | 1.7 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 222 | 235 |
| Moderate | 9 | Windarra | 294 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 18 |
| Moderate | 14 | Yanganoo | 5,955 | 2.7 | 0 | 21 | 100 | 0 | 0 | 0 | 38 | 33 | 29 | 337 | 372 |
| Low | 1 | Bevon | 329 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 16 |
| Low | 1 | Gabanintha | 1,357 | 0.6 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 54 | 68 |
| Low | 12 | Kalli | 2,649 | 1.2 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 124 | 132 |
| Low | 1 | Norie | 727 | 0.3 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 67 | 0 | 31 | 36 |
| Low | 9 | Yarrameedie | 1,051 | 0.5 | 0 | 8 | 100 | 0 | 0 | 0 | 63 | 37 | 0 | 49 | 53 |
| Low | 16 | Yowie | 12,505 | 5.8 | 0 | 16 | 100 | 0 | 0 | 0 | 44 | 44 | 12 | 55 | 625 |
| Very low | 1 | Brooking | 6,838 | 3.1 | 0 | 11 | 100 | 0 | 0 | 0 | 55 | 9 | 36 | 213 | 228 |
| Very low | 10 | Marmion | 52,599 | 24.2 | 0 | 18 | 100 | 0 | 0 | 0 | 94 | 6 | 0 | 1,738 | 1,753 |
| Very low | 10 | Tyrrell | 75,508 | 34.8 | 0 | 63 | 100 | 0 | 0 | 0 | 89 | 8 | 3 | 2,477 | 2,517 |
| Nil | 20 | Lake bed | 71 | 0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 8,916 | 4.1 | 0 | 5 | 80 | 20 | 0 | 0 | 80 | 20 | 0 | 1,090 | 1,274 |
| Moderately high | 12,904 | 5.9 | 0 | 22 | 100 | 0 | 0 | 0 | 45 | 23 | 32 | 913 | 1,075 |
| Moderate | 41,687 | 19.2 | 0 | 67 | 99 | 1 | 0 | 0 | 39 | 31 | 30 | 2,368 | 2,605 |
| Low | 18,617 | 8.6 | 0 | 29 | 97 | 3 | 0 | 0 | 45 | 45 | 10 | 829 | 931 |
| Very low | 134,944 | 62.2 | 0 | 92 | 100 | 0 | 0 | 0 | 85 | 8 | 7 | 4,429 | 4,498 |
| Nil | 71 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 217,139 | 100.0 | 0 | 215 | 99 | 1 | 0 | 0 | 61 | 22 | 17 | 9,629 | 10,383 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 47 | 31 | 22 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 215 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 99 |
| % minor | 1 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 61 |
| % fair | 22 |
| % poor | 17 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 9,630 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 10,380 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# BUNNAWARRA STATION

## PASTORAL LEASE 3114/1163

**Area:** About 91,055 ha (legal); 91,250 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 558 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 2,911 | 3.2 |
| 2 | Hills with mixed shrublands | 1 | 4,609 | 5.1 |
| 4 | Breakaways and stony plains | 2 | 1,155 | 1.3 |
| 6 | Granite plains and rises | 2 | 20,657 | 22.6 |
| 7 | Undulating acacia country | 2 | 11,781 | 12.9 |
| 8 | Chenopod plains and low rises | 1 | 8 | ^0.0 |
| 11 | Sandplains with dense mixed shrublands | 1 | 1,736 | 1.9 |
| 12 | Acacia sandplains | 1 | 15,434 | 16.9 |
| 13 | Mulga hardpan plains | 4 | 25,116 | 27.5 |
| 14 | Mulga plains with some wanderrie | 1 | 788 | 0.9 |
| 15 | Chenopod washplains | 1 | 633 | 0.7 |
| 16 | Sandy acacia plains with wanderrie | 1 | 431 | 0.5 |
| 17 | Chenopod alluvial plains | 1 | 257 | 0.3 |
| 18 | Calcreted old drainage systems | 2 | 4,474 | 4.9 |
| 20 | Lake country | 1 | 1,260 | 1.4 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 1,074 | 1.2 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 153 | 153 |
| High | 18 | Mileura | 4,327 | 4.7 | 0 | 15 | 73 | 20 | 7 | 0 | 27 | 27 | 46 | 408 | 618 |
| High | 17 | Racecourse | 257 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 37 |
| Mod. high | 18 | Cunyu | 147 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 12 |
| Mod. high | 8 | Gransal | 8 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Mod. high | 4 | Sherwood | 977 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 81 |
| Mod. high | 15 | Tango | 633 | 0.7 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 49 | 53 |
| Mod. high | 13 | Tindalarra | 20,569 | 22.5 | 0 | 24 | 92 | 8 | 0 | 0 | 13 | 42 | 45 | 1,387 | 1,714 |
| Moderate | 6 | Bandy | 158 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 10 |
| Moderate | 6 | Challenge | 20,499 | 22.5 | 0 | 24 | 96 | 4 | 0 | 0 | 8 | 63 | 29 | 1,117 | 1,281 |
| Moderate | 13 | Jundee | 3,331 | 3.7 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 190 | 208 |
| Moderate | 14 | Monk | 788 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 49 |
| Moderate | 13 | Rainbow | 1,187 | 1.3 | 0 | 5 | 100 | 0 | 0 | 0 | 20 | 60 | 20 | 66 | 74 |
| Moderate | 7 | Violet | 956 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54 | 60 |
| Moderate | 4 | Waguin | 179 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 11 |
| Moderate | 13 | Yalluwin | 30 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Low | 1 | Gabanintha | 2,242 | 2.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 112 |
| Low | 12 | Kalli | 15,434 | 16.9 | 0 | 24 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 695 | 772 |
| Low | 7 | Nerramyne | 10,824 | 11.9 | 0 | 10 | 100 | 0 | 0 | 0 | 40 | 40 | 20 | 476 | 541 |
| Low | 1 | Norie | 669 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 33 |
| Low | 16 | Yowie | 431 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 22 |
| Very low | 2 | Tallering | 4,609 | 5.1 | 0 | 4 | 100 | 0 | 0 | 0 | 25 | 75 | 0 | 137 | 154 |
| Negligible | 11 | Joseph | 1,736 | 1.9 | 0 | 10 | 100 | 0 | 0 | 0 | 20 | 70 | 10 | 35 | 35 |
| Nil | 20 | Lake bed | 186 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 5,658 | 6.2 | 0 | 16 | 75 | 19 | 6 | 0 | 31 | 25 | 44 | 592 | 808 |
| Moderately high | 22,333 | 24.5 | 0 | 26 | 92 | 8 | 0 | 0 | 16 | 42 | 42 | 1,517 | 1,861 |
| Moderate | 27,127 | 29.7 | 0 | 30 | 97 | 3 | 0 | 0 | 10 | 63 | 27 | 1,493 | 1,696 |
| Low | 29,601 | 32.4 | 0 | 34 | 100 | 0 | 0 | 0 | 47 | 47 | 6 | 1,318 | 1,480 |
| Very low | 4,609 | 5.1 | 0 | 4 | 100 | 0 | 0 | 0 | 25 | 75 | 0 | 137 | 154 |
| Negligible | 1,736 | 1.9 | 0 | 10 | 100 | 0 | 0 | 0 | 20 | 70 | 10 | 35 | 35 |
| Nil | 186 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 91,250 | 100.0 | 0 | 120 | 94 | 5 | 1 | 0 | 26 | 50 | 24 | 5,092 | 6,034 |
| **Survey average for land systems on this station** | | | | | 95 | 4 | 1 | ^0 | 44 | 34 | 22 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 120 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 94 |
| % minor | 5 |
| % moderate | 1 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 26 |
| % fair | 50 |
| % poor | 24 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 5,090 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 6,030 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# BURNERBINMAH STATION

## PASTORAL LEASE 3114/535

**Area:** About 59,908 ha (legal); 59,853 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 89 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 4 | Breakaways and stony plains | 2 | 14,705 | 24.6 |
| 6 | Granite plains and rises | 1 | 1,942 | 3.2 |
| 12 | Acacia sandplains | 1 | 14,633 | 24.4 |
| 13 | Mulga hardpan plains | 3 | 19,259 | 32.2 |
| 14 | Mulga plains with some wanderrie | 1 | 639 | 1.1 |
| 17 | Chenopod alluvial plains | 1 | 4,179 | 7.0 |
| 18 | Calcreted old drainage systems | 2 | 3,072 | 5.1 |
| 20 | Lake country | 1 | 1,424 | 2.4 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 1,424 | 2.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 174 | 203 |
| High | 17 | Ero | 4,179 | 7.0 | 84 | 19 | 58 | 26 | 5 | 11 | 26 | 53 | 21 | 426 | 597 |
| High | 18 | Mileura | 2,551 | 4.3 | 0 | 9 | 89 | 11 | 0 | 0 | 33 | 22 | 45 | 248 | 364 |
| Mod. high | 18 | Cunyu | 521 | 0.9 | 0 | 4 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 42 | 43 |
| Mod. high | 4 | Sherwood | 13,241 | 22.1 | 0 | 27 | 81 | 19 | 0 | 0 | 19 | 56 | 25 | 923 | 1,103 |
| Mod. high | 13 | Tindalarra | 3,160 | 5.3 | 0 | 6 | 100 | 0 | 0 | 0 | 17 | 83 | 0 | 232 | 263 |
| Moderate | 6 | Challenge | 1,942 | 3.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 109 | 121 |
| Moderate | 13 | Hamilton | 696 | 1.2 | 0 | 4 | 75 | 25 | 0 | 0 | 0 | 100 | 0 | 39 | 44 |
| Moderate | 4 | Waguin | 1,464 | 2.4 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 86 | 92 |
| Moderate | 13 | Woodline | 15,403 | 25.7 | 0 | 20 | 100 | 0 | 0 | 0 | 55 | 45 | 0 | 915 | 963 |
| Moderate | 14 | Yanganoo | 639 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 40 |
| Low | 12 | Kalli | 14,633 | 24.4 | 0 | 14 | 100 | 0 | 0 | 0 | 93 | 7 | 0 | 721 | 732 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 8,154 | 13.6 | 84 | 28 | 68 | 21 | 4 | 7 | 29 | 42 | 29 | 848 | 1,165 |
| Moderately high | 16,923 | 28.3 | 0 | 37 | 86 | 14 | 0 | 0 | 24 | 57 | 19 | 1,197 | 1,410 |
| Moderate | 20,143 | 33.7 | 0 | 25 | 96 | 4 | 0 | 0 | 44 | 52 | 4 | 1,184 | 1,259 |
| Low | 14,633 | 24.4 | 0 | 14 | 100 | 0 | 0 | 0 | 93 | 7 | 0 | 721 | 732 |
| **Total** | 59,853 | 100.0 | 84 | 104 | 86 | 11 | 1 | 2 | 39 | 45 | 16 | 3,950 | 4,566 |
| **Survey average for land systems on this station** | | | | | 93 | 5 | 2 | ^0 | 38 | 34 | 28 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 84 (0.1% of station) |
| Number of traverse points | 104 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 86 |
| % minor | 11 |
| % moderate | 1 |
| % severe | 2 |
| Perennial vegetation | |
| % good | 39 |
| % fair | 45 |
| % poor | 16 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 3,950 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 4,570 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# CARLAMINDA STATION

## PASTORAL LEASE 3114/632

**Area:** About 60,117 ha (legal); 60,471 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 545 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 19,403 | 32.1 |
| 6 | Granite plains and rises | 1 | 7,862 | 13.0 |
| 7 | Undulating acacia country | 2 | 2,644 | 4.4 |
| 12 | Acacia sandplains | 1 | 981 | 1.6 |
| 13 | Mulga hardpan plains | 5 | 21,165 | 35.0 |
| 14 | Mulga plains with some wanderrie | 1 | 3,111 | 5.1 |
| 15 | Chenopod washplains | 1 | 38 | 0.1 |
| 17 | Chenopod alluvial plains | 2 | 4,488 | 7.4 |
| 18 | Calcreted old drainage systems | 1 | 782 | 1.3 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | Scc* (dse) | Pcc** (dse) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | | | |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | | |
| High | 17 | Ero | 153 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 16 | 22 |
| High | 18 | Mileura | 782 | 1.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 80 | 112 |
| High | 17 | Racecourse | 4,335 | 7.2 | 0 | 8 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | | 573 | 619 |
| Mod. high | 15 | Tango | 38 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 3 | 3 |
| Mod. high | 13 | Tindalarra | 17,017 | 28.1 | 0 | 31 | 88 | 6 | 6 | 0 | 32 | 45 | 23 | | 1,218 | 1,418 |
| Moderate | 6 | Challenge | 7,862 | 13.0 | 0 | 8 | 88 | 12 | 0 | 0 | 12 | 88 | 0 | | 443 | 491 |
| Moderate | 13 | Hamilton | 594 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 33 | 37 |
| Moderate | 13 | Jundee | 1,520 | 2.5 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | | 87 | 95 |
| Moderate | 14 | Monk | 3,111 | 5.1 | 0 | 10 | 100 | 0 | 0 | 0 | 40 | 50 | 10 | | 180 | 194 |
| Moderate | 13 | Ranch | 1,123 | 1.9 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | | 66 | 70 |
| Moderate | 7 | Violet | 1,845 | 3.1 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | | 104 | 115 |
| Moderate | 13 | Yalluwin | 910 | 1.5 | 81 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | | 47 | 57 |
| Low | 1 | Gabanintha | 19,402 | 32.1 | 0 | 43 | 98 | 2 | 0 | 0 | 30 | 68 | 2 | | 834 | 970 |
| Low | 12 | Kalli | 981 | 1.6 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | | 49 | 49 |
| Low | 7 | Nerramyne | 799 | 1.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 36 | 40 |
| Low | 1 | Norie | ^0 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 5,270 | 8.7 | 0 | 8 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 669 | 753 |
| Moderately high | 17,054 | 28.2 | 0 | 31 | 88 | 6 | 6 | 0 | 32 | 45 | 23 | 1,221 | 1,421 |
| Moderate | 16,965 | 28.1 | 81 | 23 | 96 | 0 | 4 | 0 | 31 | 65 | 4 | 959 | 1,060 |
| Low | 21,182 | 35.0 | 0 | 44 | 98 | 2 | 0 | 0 | 32 | 66 | 2 | 919 | 1,059 |
| **Total** | 60,471 | 100.0 | 81 | 106 | 94 | 3 | 3 | 0 | 35 | 57 | 8 | 3,768 | 4,293 |
| **Survey average for land systems on this station** | | | | | 92 | 5 | 2 | 1 | 35 | 38 | 27 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 81 (0.1% of station) |
| Number of traverse points | 106 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 94 |
| % minor | 3 |
| % moderate | 3 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 35 |
| % fair | 57 |
| % poor | 8 |
| ! Suggested carrying capacity (dse) over summer, following an effective winter season | 3,770 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 4,290 |

! The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# CASHMERE DOWNS STATION

## PASTORAL LEASE 3114/658

**Area:** About 140,714 ha (legal); 141,741 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 6 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 3 | 9,753 | 6.9 |
| 4 | Breakaways and stony plains | 2 | 3,936 | 2.8 |
| 5 | Breakaways and chenopod plains | 1 | 2,058 | 1.5 |
| 6 | Granite plains and rises | 2 | 12,011 | 8.5 |
| 7 | Undulating acacia country | 1 | 1,918 | 1.4 |
| 8 | Chenopod plains and low rises | 1 | 2,072 | 1.5 |
| 9 | Stony non-chenopod plains | 1 | 2,854 | 2.0 |
| 10 | Spinifex sandplains | 2 | 50,334 | 35.5 |
| 12 | Acacia sandplains | 1 | 6,256 | 4.4 |
| 13 | Mulga hardpan plains | 2 | 2,784 | 2.0 |
| 14 | Mulga plains with some wanderrie | 1 | 2,740 | 1.9 |
| 15 | Chenopod washplains | 1 | 423 | 0.3 |
| 16 | Sandy acacia plains with wanderrie | 2 | 29,937 | 21.1 |
| 17 | Chenopod alluvial plains | 2 | 1,927 | 1.4 |
| 18 | Calcreted old drainage systems | 1 | 590 | 0.4 |
| 20 | Lake country | 1 | 12,146 | 8.6 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 11,947 | 8.4 | 0 | 13 | 92 | 8 | 0 | 0 | 77 | 15 | 8 | 1,553 | 1,707 |
| High | 5 | Gumbreak | 2,058 | 1.5 | 0 | 9 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 294 | 294 |
| High | 17 | Joy | 1,299 | 0.9 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 176 | 186 |
| High | 18 | Mileura | 590 | 0.4 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 67 | 0 | 67 | 84 |
| Mod. high | 8 | Gransal | 2,072 | 1.5 | 0 | 4 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 160 | 173 |
| Mod. high | 15 | Monitor | 423 | 0.3 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 24 | 35 |
| Mod. high | 4 | Sherwood | 931 | 0.7 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 78 | 78 |
| Mod. high | 17 | Wilson | 628 | 0.4 | 0 | 4 | 100 | 0 | 0 | 0 | 25 | 50 | 25 | 44 | 52 |
| Moderate | 16 | Ararak | 2,595 | 1.8 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 153 | 162 |
| Moderate | 6 | Bandy | 4,343 | 3.1 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 261 | 271 |
| Moderate | 6 | Challenge | 7,668 | 5.4 | 0 | 14 | 93 | 7 | 0 | 0 | 36 | 28 | 36 | 430 | 479 |
| Moderate | 13 | Jundee | 1,504 | 1.1 | 0 | 4 | 100 | 0 | 0 | 0 | 25 | 75 | 0 | 86 | 94 |
| Moderate | 14 | Monk | 2,740 | 1.9 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 0 | 67 | 148 | 171 |
| Moderate | 13 | Rainbow | 1,280 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 80 |
| Moderate | 7 | Violet | 1,918 | 1.4 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 108 | 120 |
| Moderate | 4 | Waguin | 3,006 | 2.1 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 177 | 188 |
| Moderate | 9 | Windarra | 2,854 | 2.0 | 0 | 4 | 100 | 0 | 0 | 0 | 25 | 0 | 75 | 152 | 178 |
| Low | 1 | Gabanintha | 997 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 50 |
| Low | 12 | Kalli | 6,256 | 4.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 293 | 313 |
| Low | 1 | Norie | 132 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 7 |
| Low | 16 | Yowie | 27,344 | 19.3 | 0 | 21 | 100 | 0 | 0 | 0 | 52 | 29 | 19 | 1,236 | 1,367 |
| Very low | 1 | Brooking | 8,625 | 6.1 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 273 | 288 |
| Very low | 10 | Marmion | 28,077 | 19.8 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 915 | 936 |
| Very low | 10 | Tyrrell | 22,258 | 15.7 | 0 | 19 | 100 | 0 | 0 | 0 | 84 | 11 | 5 | 725 | 742 |
| Nil | 20 | Lake bed | 198 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 15,894 | 11.2 | 0 | 28 | 96 | 4 | 0 | 0 | 78 | 18 | 4 | 2,091 | 2,271 |
| Moderately high | 4,054 | 2.9 | 0 | 11 | 100 | 0 | 0 | 0 | 45 | 36 | 19 | 306 | 338 |
| Moderate | 27,908 | 19.7 | 0 | 32 | 97 | 3 | 0 | 0 | 34 | 32 | 34 | 1,586 | 1,744 |
| Low | 34,728 | 24.5 | 0 | 21 | 100 | 0 | 0 | 0 | 52 | 29 | 19 | 1,578 | 1,736 |
| Very low | 58,959 | 41.6 | 0 | 22 | 100 | 0 | 0 | 0 | 77 | 9 | 14 | 1,913 | 1,965 |
| Nil | 198 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 128 | 78 |
| **Total** | 141,741 | 100.0 | 0 | 114 | 98 | 2 | 0 | 0 | 58 | 24 | 18 | 7,472 | 8,052 |
| **Survey average for land systems on this station** | | | | | 95 | 3 | 1 | ^0 | 48 | 32 | 20 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 114 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 98 |
| % minor | 2 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 58 |
| % fair | 24 |
| % poor | 18 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 7,470 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 8,050 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# CHALLA STATION

## PASTORAL LEASE 3114/496 + GRAZING RIGHTS ON RESERVE 6270

**Area:** About 87,488 ha (legal); 87,284 ha (computed)

**Area surveyed:** 91,306 ha (whole station plus reserve 6270)

**Land Conservation District:** Mt Magnet

**Shire(s):** Mt Magnet

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 178 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 8,846 | 9.7 |
| 4 | Breakaways and stony plains | 1 | 2,623 | 2.9 |
| 5 | Breakaways and chenopod plains | 1 | 10,315 | 11.3 |
| 6 | Granite plains and rises | 1 | 124 | 0.1 |
| 7 | Undulating acacia country | 2 | 3,184 | 3.5 |
| 8 | Chenopod plains and low rises | 3 | 4,624 | 5.1 |
| 9 | Stony non-chenopod plains | 1 | 187 | 0.2 |
| 12 | Acacia sandplains | 1 | 315 | 0.3 |
| 13 | Mulga hardpan plains | 3 | 26,192 | 28.7 |
| 14 | Mulga plains with some wanderrie | 1 | 356 | 0.4 |
| 15 | Chenopod washplains | 1 | 1,995 | 2.2 |
| 16 | Sandy acacia plains with wanderrie | 1 | 767 | 0.8 |
| 17 | Chenopod alluvial plains | 4 | 19,507 | 21.4 |
| 18 | Calcreted old drainage systems | 1 | 1,874 | 2.1 |
| 20 | Lake country | 1 | 10,398 | 11.4 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde[-] | No. of traverse points[#] | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc[*] (dse) | Pcc[**] (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Very high | 17 | Merbla | 13,479 | 14.8 | ^0 | 35 | 66 | 14 | 20 | 0 | 17 | 40 | 43 | 1,501 | 2,696 |
| High | 8 | Austin | 452 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 65 |
| High | 20 | Carnegie | 9,765 | 10.7 | 0 | 8 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 1,395 | 1,395 |
| High | 17 | Ero | 3,745 | 4.1 | 0 | 7 | 100 | 0 | 0 | 0 | 86 | 14 | 0 | 381 | 535 |
| High | 18 | Mileura | 1,874 | 2.1 | 0 | 12 | 100 | 0 | 0 | 0 | 58 | 42 | 0 | 234 | 268 |
| High | 17 | Roderick | 1,224 | 1.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 136 | 175 |
| High | 17 | Steer | 1,059 | 1.2 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 151 | 151 |
| Mod. high | 8 | Gransal | 44 | ^0.0 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 4 | 4 |
| Mod. high | 5 | Hootanui | 10,315 | 11.3 | 0 | 21 | 95 | 0 | 5 | 0 | 24 | 71 | 5 | 758 | 860 |
| Mod. high | 8 | Nallex | 4,127 | 4.5 | 0 | 16 | 88 | 12 | 0 | 0 | 12 | 63 | 25 | 284 | 344 |
| Mod. high | 7 | Nubev | 2,555 | 2.8 | 0 | 7 | 100 | 0 | 0 | 0 | 0 | 57 | 43 | 165 | 213 |
| Mod. high | 4 | Sherwood | 2,623 | 2.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 190 | 219 |
| Mod. high | 15 | Tango | 1,995 | 2.2 | 0 | 8 | 100 | 0 | 0 | 0 | 37 | 63 | 0 | 151 | 166 |
| Moderate | 6 | Challenge | 124 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 8 |
| Moderate | 9 | Felix | 187 | 0.2 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 12 | 12 |
| Moderate | 13 | Hamilton | 1,618 | 1.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 101 |
| Moderate | 13 | Jundee | 7,627 | 8.4 | 0 | 12 | 100 | 0 | 0 | 0 | 42 | 42 | 16 | 439 | 477 |
| Moderate | 7 | Violet | 629 | 0.7 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 33 | 67 | 33 | 39 |
| Moderate | 13 | Woodline | 16,947 | 18.6 | 0 | 8 | 100 | 0 | 0 | 0 | 25 | 75 | 0 | 943 | 1,059 |
| Moderate | 14 | Yanganoo | 356 | 0.4 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 22 | 22 |
| Low | 12 | Kalli | 315 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 16 |
| Low | 1 | Naluthanna | 6,617 | 7.2 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 67 | 0 | 269 | 331 |
| Low | 1 | Teutonic | 2,229 | 2.4 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 89 | 111 |
| Low | 16 | Yowie | 767 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 38 |
| Nil | 20 | Lake bed | 633 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) | Pcc (dse) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | (from table 2) | |
| Very high | 13,479 | 14.8 | ^0 | 35 | 66 | 14 | 20 | 0 | 17 | 40 | 43 | 1,501 | 2,696 |
| High | 18,119 | 19.8 | 0 | 30 | 100 | 0 | 0 | 0 | 80 | 20 | 0 | 2,347 | 2,588 |
| Moderately high | 21,659 | 23.7 | 0 | 53 | 94 | 4 | 2 | 0 | 21 | 64 | 15 | 1,552 | 1,805 |
| Moderate | 27,488 | 30.1 | 0 | 26 | 100 | 0 | 0 | 0 | 39 | 46 | 15 | 1,546 | 1,718 |
| Low | 9,928 | 10.9 | 0 | 5 | 100 | 0 | 0 | 0 | 20 | 60 | 20 | 408 | 496 |
| Nil | 633 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 91,306 | 100.0 | ^0 | 149 | 90 | 5 | 5 | 0 | 35 | 46 | 19 | 7,354 | 9,303 |
| **Survey average for land systems on this station** | | | | | 94 | 4 | 2 | ^0 | 40 | 34 | 26 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | ^0 (< 0.1% of area surveyed) |
| Number of traverse points | 149 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 90 |
| % minor | 5 |
| % moderate | 5 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 35 |
| % fair | 46 |
| % poor | 19 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 7,350 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 9,300 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# COGLA DOWNS STATION

## PASTORAL LEASE 3114/744

**Area:** About 199,478 ha (legal); 199,196 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Cue; Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 551 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 3 | 1,414 | 0.7 |
| 4 | Breakaways and stony plains | 2 | 26,640 | 13.4 |
| 5 | Breakaways land chenopod plains | 1 | 2,804 | 1.4 |
| 7 | Undulating acacia country | 1 | 812 | 0.4 |
| 8 | Chenopod plains and low rises | 2 | 2,847 | 1.4 |
| 9 | Stony non-chenopod plains | 1 | 828 | 0.4 |
| 10 | Spinifex sandplains | 1 | 43,036 | 21.6 |
| 12 | Acacia sandplains | 1 | 64,570 | 32.4 |
| 13 | Mulga hardpan plains | 3 | 11,673 | 5.9 |
| 14 | Mulga plains with some wanderrie | 1 | 35,247 | 17.7 |
| 17 | Chenopod alluvial plains | 2 | 3,011 | 1.5 |
| 18 | Calcreted old drainage systems | 3 | 6,252 | 3.1 |
| 20 | Lake country | 1 | 62 | ^0.0 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 62 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 9 |
| High | 17 | Ero | 971 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 99 | 139 |
| High | 17 | Steer | 2,040 | 1.0 | 0 | 2 | 0 | 50 | 50 | 0 | 0 | 0 | 100 | 128 | 291 |
| Mod. high | 18 | Cunyu | 3,354 | 1.7 | 57 | 15 | 66 | 27 | 7 | 0 | 0 | 0 | 100 | 183 | 280 |
| Mod. high | 8 | Gransal | 2,131 | 1.1 | 53 | 6 | 33 | 33 | 17 | 17 | 0 | 17 | 83 | 121 | 178 |
| Mod. high | 5 | Hootanui | 2,804 | 1.4 | 0 | 7 | 100 | 0 | 0 | 0 | 0 | 29 | 71 | 169 | 234 |
| Mod. high | 8 | Millex | 716 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 60 |
| Mod. high | 4 | Sherwood | 21,021 | 10.6 | 387 | 24 | 67 | 21 | 12 | 0 | 29 | 17 | 54 | 1,372 | 1,752 |
| Mod. high | 1 | Wiluna | 1,153 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78 | 96 |
| Moderate | 18 | Cosmo | 162 | 0.1 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 10 | 10 |
| Moderate | 13 | Jundee | 982 | 0.5 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 61 | 61 |
| Moderate | 18 | Melaleuca | 2,736 | 1.4 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 151 | 171 |
| Moderate | 13 | Ranch | 959 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 60 |
| Moderate | 7 | Violet | 812 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 51 |
| Moderate | 4 | Waguin | 5,619 | 2.8 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 331 | 351 |
| Moderate | 9 | Windarra | 828 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 52 |
| Moderate | 13 | Woodline | 9,732 | 4.9 | 0 | 31 | 100 | 0 | 0 | 0 | 32 | 23 | 45 | 538 | 608 |
| Moderate | 14 | Yanganoo | 35,247 | 17.7 | 17 | 48 | 92 | 8 | 0 | 0 | 17 | 35 | 48 | 1,905 | 2,203 |
| Low | 1 | Gabanintha | 207 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 10 |
| Low | 12 | Kalli | 64,570 | 32.4 | 0 | 36 | 100 | 0 | 0 | 0 | 81 | 11 | 8 | 3,028 | 3,229 |
| Low | 1 | Naluthanna | 54 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |
| Very low | 10 | Bullimore | 43,036 | 21.6 | 0 | 41 | 100 | 0 | 0 | 0 | 78 | 5 | 17 | 1,389 | 1,435 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 3,073 | 1.5 | 0 | 2 | 0 | 50 | 50 | 0 | 0 | 0 | 100 | 235 | 439 |
| Moderately high | 31,179 | 15.7 | 497 | 52 | 67 | 21 | 10 | 2 | 13 | 13 | 74 | 1,973 | 2,598 |
| Moderate | 57,077 | 28.7 | 17 | 86 | 95 | 5 | 0 | 0 | 27 | 29 | 44 | 3,139 | 3,567 |
| Low | 64,831 | 32.5 | 0 | 36 | 100 | 0 | 0 | 0 | 81 | 11 | 8 | 3,039 | 3,242 |
| Very low | 43,036 | 21.6 | 0 | 41 | 100 | 0 | 0 | 0 | 78 | 5 | 17 | 1,389 | 1,435 |
| **Total** | 199,196 | 100.0 | 514 | 217 | 89 | 7 | 3 | 1 | 42 | 18 | 40 | 9,775 | 11,281 |
| **Survey average for land systems on this station** | | | | | 93 | 5 | 1 | 1 | 43 | 31 | 26 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 514 (0.3% of station) |
| Number of traverse points | 217 (includes 17 points from the Murchison rangeland survey) |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 89 |
| % minor | 7 |
| % moderate | 3 |
| % severe | 1 |
| Perennial vegetation | |
| % good | 42 |
| % fair | 18 |
| % poor | 40 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 9,780 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 11,280 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# DANDARAGA STATION

## PASTORAL LEASE 3114/1054

**Area:** About 351,940 ha (legal); 353,192 ha (computed)
**Area surveyed:** Whole station
**Land Conservation District:** Sandstone
**Shire(s):** Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 5,512†ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 6 | 12,353 | 3.5 |
| 4 | Breakaways and stony plains | 2 | 11,960 | 3.4 |
| 5 | Breakaways and chenopod plains | 1 | 9,718 | 2.8 |
| 6 | Granite plains and rises | 2 | 9,974 | 2.8 |
| 7 | Undulating acacia country | 2 | 6,812 | 1.9 |
| 8 | Chenopod plains and low rises | 1 | 19,980 | 5.7 |
| 9 | Stony non-chenopod plains | 1 | 16,418 | 4.6 |
| 10 | Spinifex sandplains | 3 | 70,750 | 20.0 |
| 12 | Acacia sandplains | 1 | 10,380 | 2.9 |
| 13 | Mulga hardpan plains | 5 | 42,154 | 11.9 |
| 14 | Mulga plains with some wanderrie | 2 | 93,275 | 26.4 |
| 15 | Chenopod washplains | 1 | 1,454 | 0.4 |
| 16 | Sandy acacia plains with wanderrie | 2 | 8,039 | 2.3 |
| 18 | Calcreted old drainage systems | 4 | 10,332 | 2.9 |
| 20 | Lake country | 1 | 29,592 | 8.4 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 25,340 | 7.2 | 0 | 16 | 100 | 0 | 0 | 0 | 63 | 31 | 6 | 3,103 | 3,620 |
| High | 5 | Gumbreak | 9,718 | 2.8 | 0 | 12 | 92 | 8 | 0 | 0 | 42 | 42 | 16 | 1,088 | 1,388 |
| High | 18 | Mileura | 6,592 | 1.9 | 0 | 10 | 100 | 0 | 0 | 0 | 70 | 20 | 10 | 674 | 942 |
| Mod. high | 18 | Cunyu | 3,337 | 0.9 | 0 | 5 | 100 | 0 | 0 | 0 | 20 | 40 | 40 | 206 | 278 |
| Mod. high | 8 | Gransal | 19,980 | 5.7 | 0 | 34 | 68 | 20 | 9 | 3 | 26 | 45 | 29 | 1,397 | 1,665 |
| Mod. high | 15 | Monitor | 1,454 | 0.4 | 188 | 1 | 0 | 0 | 100 | 0 | 0 | 0 | 100 | 83 | 121 |
| Mod. high | 7 | Nubev | 954 | 0.3 | 0 | 4 | 75 | 25 | 0 | 0 | 25 | 25 | 50 | 63 | 80 |
| Mod. high | 4 | Sherwood | 11,374 | 3.2 | 0 | 12 | 100 | 0 | 0 | 0 | 50 | 33 | 17 | 849 | 948 |
| Mod. high | 1 | Wiluna | 4,828 | 1.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 325 | 402 |
| Moderate | 6 | Bandy | 56 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 |
| Moderate | 6 | Challenge | 9,919 | 2.8 | 0 | 14 | 100 | 0 | 0 | 0 | 29 | 29 | 42 | 548 | 620 |
| Moderate | 18 | Cosmo | 314 | 0.1 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 16 | 20 |
| Moderate | 16 | Desdemona | 5,359 | 1.5 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 33 | 67 | 278 | 335 |
| Moderate | 13 | Hamilton | 4,610 | 1.3 | 0 | 6 | 100 | 0 | 0 | 0 | 33 | 67 | 0 | 255 | 288 |
| Moderate | 13 | Jundee | 9,177 | 2.6 | 219 | 18 | 100 | 0 | 0 | 0 | 11 | 61 | 28 | 492 | 574 |
| Moderate | 18 | Melaleuca | 89 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 6 |
| Moderate | 14 | Monk | 77,189 | 21.9 | 131 | 55 | 98 | 2 | 0 | 0 | 15 | 36 | 49 | 4,258 | 4,824 |
| Moderate | 13 | Rainbow | 4,994 | 1.4 | 86 | 7 | 100 | 0 | 0 | 0 | 14 | 29 | 57 | 262 | 312 |
| Moderate | 7 | Violet | 5,858 | 1.7 | 0 | 10 | 100 | 0 | 0 | 0 | 20 | 40 | 40 | 321 | 366 |
| Moderate | 4 | Waguin | 586 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 37 |
| Moderate | 9 | Windarra | 16,418 | 4.6 | 0 | 27 | 93 | 7 | 0 | 0 | 30 | 33 | 37 | 913 | 1,026 |
| Moderate | 13 | Woodline | 12,419 | 3.5 | 0 | 7 | 100 | 0 | 0 | 0 | 29 | 14 | 57 | 691 | 776 |
| Moderate | 13 | Yalluwin | 10,954 | 3.1 | 260 | 9 | 56 | 22 | 0 | 22 | 0 | 0 | 100 | 604 | 685 |
| Moderate | 14 | Yanganoo | 16,086 | 4.6 | 0 | 6 | 100 | 0 | 0 | 0 | 33 | 67 | 0 | 888 | 1,005 |
| Low | 1 | Bevon | 217 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 11 |
| Low | 1 | Gabanintha | 1,652 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 83 |
| Low | 12 | Kalli | 10,380 | 2.9 | 0 | 9 | 100 | 0 | 0 | 0 | 56 | 44 | 0 | 473 | 519 |
| Low | 1 | Naluthanna | 66 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Low | 1 | Norie | 714 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 36 |
| Low | 16 | Yowie | 2,680 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 121 | 134 |
| Very low | 1 | Brooking | 4,877 | 1.4 | 0 | 4 | 75 | 25 | 0 | 0 | 25 | 0 | 75 | 145 | 163 |
| Very low | 10 | Bullimore | 20,207 | 5.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 663 | 674 |
| Very low | 10 | Marmion | 18,895 | 5.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 615 | 630 |
| Very low | 10 | Tyrrell | 31,648 | 9.0 | 0 | 17 | 100 | 0 | 0 | 0 | 88 | 0 | 12 | 1,025 | 1,055 |
| Nil | 20 | Lake bed | 4,252 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 41,650 | 11.8 | 0 | 38 | 97 | 3 | 0 | 0 | 57 | 32 | 11 | 4,865 | 5,950 |
| Moderately high | 41,927 | 11.9 | 188 | 56 | 77 | 14 | 7 | 2 | 30 | 40 | 30 | 2,923 | 3,494 |
| Moderate | 174,028 | 49.3 | 696 | 163 | 96 | 3 | 0 | 1 | 19 | 37 | 44 | 9,567 | 10,877 |
| Low | 15,708 | 4.4 | 0 | 9 | 100 | 0 | 0 | 0 | 56 | 44 | 0 | 711 | 785 |
| Very low | 75,627 | 21.4 | 0 | 21 | 95 | 5 | 0 | 0 | 76 | 0 | 24 | 2,448 | 2,521 |
| Nil | 4,252 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 353,192 | 100.0 | 884 | 287 | 93 | 5 | 1 | 1 | 32 | 34 | 34 | 20,514 | 23,627 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 45 | 31 | 24 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 884 (0.2% of station) |
| Number of traverse points | 287 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 93 |
| % minor | 5 |
| % moderate | 1 |
| % severe | 1 |
| Perennial vegetation | |
| % good | 32 |
| % fair | 34 |
| % poor | 34 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 20,510 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 23,630 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# DIEMALS STATION

## PASTORAL LEASE 3114/1110

**Area:** About 313,453 ha (legal); 316,551 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Menzies; Yilgarn

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 1,397†ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 8,040 | 2.5 |
| 2 | Hills with mixed shrublands | 1 | 19,752 | 6.2 |
| 3 | Hills with chenopods | 1 | 1,029 | 0.3 |
| 4 | Breakaways and stony plains | 2 | 10,615 | 3.4 |
| 5 | Breakaways and chenopod plains | 1 | 2,890 | 0.9 |
| 6 | Granite plains and rises | 1 | 969 | 0.3 |
| 8 | Chenopod plains and low rises | 1 | 40,169 | 12.7 |
| 11 | Sandplains with dense mixed shrublands | 2 | 77,922 | 24.6 |
| 16 | Sandy acacia plains with wanderrie | 3 | 90,078 | 28.5 |
| 17 | Chenopod alluvial plains | 1 | 3,441 | 1.1 |
| 19 | Plains with eucalypt woodlands | 3 | 29,700 | 9.4 |
| 20 | Lake country | 1 | 31,947 | 10.1 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 29,688 | 9.4 | 0 | 53 | 100 | 0 | 0 | 0 | 83 | 17 | 0 | 4,025 | 4,241 |
| High | 5 | Gumbreak | 2,890 | 0.9 | 0 | 7 | 100 | 0 | 0 | 0 | 86 | 0 | 14 | 380 | 413 |
| Mod. high | 17 | Campsite | 3,441 | 1.1 | 0 | 4 | 100 | 0 | 0 | 0 | 75 | 0 | 25 | 244 | 287 |
| Mod. high | 19 | Doney | 19,647 | 6.2 | 0 | 24 | 100 | 0 | 0 | 0 | 33 | 25 | 42 | 1,350 | 1,637 |
| Mod. high | 4 | Euchre | 8,948 | 2.8 | 0 | 6 | 100 | 0 | 0 | 0 | 83 | 17 | 0 | 710 | 746 |
| Mod. high | 3 | Graves | 1,029 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 | 86 |
| Mod. high | 8 | Moriarty | 40,169 | 12.7 | 0 | 52 | 98 | 2 | 0 | 0 | 25 | 44 | 31 | 2,791 | 3,347 |
| Moderate | 6 | Bandy | 969 | 0.3 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 48 | 61 |
| Moderate | 19 | Deadman | 695 | 0.2 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 33 | 34 | 39 | 43 |
| Moderate | 16 | Illaara | 8,915 | 2.8 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 534 | 557 |
| Moderate | 19 | Pindar | 9,358 | 3.0 | 0 | 18 | 100 | 0 | 0 | 0 | 16 | 56 | 28 | 516 | 585 |
| Moderate | 4 | Waguin | 1,667 | 0.5 | 0 | 7 | 100 | 0 | 0 | 0 | 14 | 86 | 0 | 94 | 104 |
| Low | 11 | Bannar | 76,766 | 24.3 | 0 | 57 | 100 | 0 | 0 | 0 | 91 | 7 | 2 | 3,769 | 3,838 |
| Low | 1 | Mulline | 7,734 | 2.4 | 0 | 12 | 100 | 0 | 0 | 0 | 8 | 50 | 42 | 316 | 387 |
| Low | 1 | Norie | 306 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 15 |
| Low | 16 | Tealtoo | 34,638 | 10.9 | 0 | 34 | 100 | 0 | 0 | 0 | 32 | 50 | 18 | 1,579 | 1,732 |
| Low | 16 | Yowie | 46,525 | 14.7 | 0 | 33 | 100 | 0 | 0 | 0 | 49 | 33 | 18 | 2,089 | 2,326 |
| Very low | 2 | Dryandra | 19,752 | 6.2 | 0 | 11 | 100 | 0 | 0 | 0 | 64 | 27 | 9 | 641 | 658 |
| Negligible | 11 | Joseph | 1,156 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 23 |
| Nil | 20 | Lake bed | 2,259 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | | Scc (dse) | Pcc (dse) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | | (from table 2) | |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | | |
| High | 32,578 | 10.3 | 0 | 60 | 100 | 0 | 0 | 0 | 83 | 15 | 2 | | 4,405 | 4,654 |
| Moderately high | 73,234 | 23.1 | 0 | 86 | 99 | 1 | 0 | 0 | 34 | 35 | 31 | | 5,171 | 6,103 |
| Moderate | 21,604 | 6.8 | 0 | 30 | 100 | 0 | 0 | 0 | 20 | 57 | 23 | | 1,231 | 1,350 |
| Low | 165,968 | 52.4 | 0 | 136 | 100 | 0 | 0 | 0 | 59 | 28 | 13 | | 7,767 | 8,298 |
| Very low | 19,752 | 6.3 | 0 | 11 | 100 | 0 | 0 | 0 | 64 | 27 | 9 | | 641 | 658 |
| Negligible | 1,156 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 23 | 23 |
| Nil | 2,259 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| **Total** | 316,551 | 100.0 | 0 | 323 | 100 | ^0 | 0 | 0 | 53 | 30 | 17 | | 19,238 | 21,086 |
| **Survey average for land systems on this station** | | | | | 98 | 1 | ^0 | ^0 | 62 | 27 | 11 | | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 323 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 100 |
| % minor | ^0 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 53 |
| % fair | 30 |
| % poor | 17 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 19,240 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 21,090 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# EDAH STATION

## PASTORAL LEASE 3114/993

**Area:** About 103,536 ha (legal); 103,403 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 760 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 12,772 | 12.4 |
| 4 | Breakaways and stony plains | 2 | 7,030 | 6.8 |
| 6 | Granite plains and rises | 1 | 13,006 | 12.6 |
| 7 | Undulating acacia country | 1 | 30 | 0.0 |
| 12 | Acacia sandplains | 1 | 25,046 | 24.2 |
| 13 | Mulga hardpan plains | 3 | 33,738 | 32.6 |
| 17 | Chenopod alluvial plains | 1 | 31 | ^0.0 |
| 18 | Calcreted old drainage systems | 2 | 2,318 | 2.2 |
| 20 | Lake country | 1 | 9,432 | 9.1 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 8,471 | 8.2 | 0 | 20 | 100 | 0 | 0 | 0 | 85 | 15 | 0 | 1,156 | 1,210 |
| High | 17 | Ero | 31 | ^0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 |
| High | 18 | Mileura | 1,708 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 175 | 244 |
| Mod. high | 18 | Cunyu | 610 | 0.6 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 51 | 51 |
| Mod. high | 4 | Sherwood | 4,056 | 3.9 | 0 | 7 | 86 | 0 | 14 | 0 | 14 | 57 | 29 | 278 | 338 |
| Mod. high | 13 | Tindalarra | 15,485 | 15.0 | 0 | 11 | 91 | 9 | 0 | 0 | 0 | 27 | 73 | 1,044 | 1,290 |
| Moderate | 6 | Challenge | 13,006 | 13.0 | 0 | 24 | 92 | 8 | 0 | 0 | 8 | 50 | 42 | 699 | 813 |
| Moderate | 13 | Hamilton | 5,011 | 4.8 | 0 | 19 | 100 | 0 | 0 | 0 | 0 | 47 | 53 | 264 | 313 |
| Moderate | 7 | Violet | 30 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Moderate | 4 | Waguin | 2,974 | 2.9 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 175 | 186 |
| Moderate | 13 | Woodline | 13,242 | 13.0 | 0 | 31 | 100 | 0 | 0 | 0 | 42 | 48 | 10 | 767 | 828 |
| Low | 12 | Kalli | 25,046 | 24.0 | 0 | 28 | 100 | 0 | 0 | 0 | 78 | 18 | 4 | 1,197 | 1,252 |
| Low | 1 | Norie | 12,772 | 12.0 | 0 | 6 | 100 | 0 | 0 | 0 | 33 | 67 | 0 | 553 | 639 |
| Nil | 20 | Lake bed | 961 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | (from table 2) |
| High | 10,210 | 9.9 | 0 | 20 | 100 | 0 | 0 | 0 | 85 | 15 | 0 | 1,334 |
| Moderately high | 20,151 | 19.5 | 0 | 22 | 90 | 5 | 5 | 0 | 23 | 32 | 45 | 1,373 |
| Moderate | 34,263 | 33.1 | 0 | 75 | 97 | 3 | 0 | 0 | 21 | 48 | 31 | 1,907 |
| Low | 37,818 | 36.6 | 0 | 34 | 100 | 0 | 0 | 0 | 71 | 26 | 3 | 1,750 |
| Nil | 961 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 103,403 | 100.0 | 0 | 151 | 97 | 2 | 1 | 0 | 41 | 36 | 23 | 6,364 |
| **Survey average for land systems on this station** | | | | | 93 | 5 | 2 | ^0 | 39 | 35 | 26 | |

| Pastoral potential | Pcc (dse) (from table 2) |
|---|---|
| High | 1,459 |
| Moderately high | 1,679 |
| Moderate | 2,141 |
| Low | 1,891 |
| Nil | 0 |
| **Total** | 7,170 |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 151 (includes 15 points from the Murchison rangeland survey) |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 97 |
| % minor | 2 |
| % moderate | 1 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 41 |
| % fair | 36 |
| % poor | 23 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 6,360 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 7,170 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# GABYON STATION

## PASTORAL LEASE 3114/662

**Area:** About 271,531 ha (legal); 271,755 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Mullewa; Murchison; Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease =†1,622†ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 16,764 | 6.2 |
| 4 | Breakaways and stony plains | 1 | 1,145 | 0.4 |
| 6 | Granite plains and rises | 2 | 68,619 | 25.3 |
| 7 | Undulating acacia country | 2 | 20,002 | 7.4 |
| 11 | Sandplains with dense mixed shrublands | 1 | 11,842 | 4.4 |
| 12 | Acacia sandplains | 1 | 21,721 | 8.0 |
| 13 | Mulga hardpan plains | 5 | 99,683 | 36.7 |
| 14 | Mulga plains with some wanderrie | 2 | 10,056 | 3.7 |
| 17 | Chenopod alluvial plains | 3 | 13,999 | 5.2 |
| 18 | Calcreted old drainage systems | 2 | 1,039 | 0.4 |
| 19 | Plains with eucalypt woodlands | 1 | 6,885 | 2.5 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | Scc* (dse) | Pcc** (dse) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | | |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 17 | Ero | 13,158 | 4.8 | 69 | 25 | 52 | 44 | 4 | 0 | 48 | 40 | 12 | 1,338 | 1,880 |
| High | 18 | Mileura | 281 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 40 |
| High | 17 | Racecourse | 453 | 0.2 | 0 | 2 | 50 | 0 | 0 | 50 | 0 | 0 | 100 | 28 | 65 |
| High | 17 | Yewin | 388 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 55 |
| Mod. high | 14 | Bunny | 1,636 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 136 |
| Mod. high | 18 | Cunyu | 758 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 63 |
| Mod. high | 13 | Tindalarra | 91,792 | 33.8 | 547 | 107 | 84 | 7 | 5 | 4 | 15 | 45 | 40 | 6,189 | 7,649 |
| Moderate | 6 | Bandy | 1,388 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 83 | 87 |
| Moderate | 6 | Challenge | 67,231 | 24.7 | 0 | 37 | 94 | 3 | 0 | 3 | 38 | 27 | 35 | 3,779 | 4,202 |
| Moderate | 13 | Hamilton | 444 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 28 |
| Moderate | 13 | Jundee | 3,548 | 1.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 203 | 222 |
| Moderate | 19 | Pindar | 6,885 | 2.5 | 0 | 16 | 100 | 0 | 0 | 0 | 38 | 43 | 19 | 393 | 430 |
| Moderate | 13 | Ranch | 3,885 | 1.4 | 0 | 12 | 75 | 25 | 0 | 0 | 25 | 58 | 17 | 219 | 243 |
| Moderate | 7 | Violet | 921 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 58 |
| Moderate | 4 | Waguin | 1,145 | 0.4 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 64 | 72 |
| Moderate | 13 | Woodline | 14 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Moderate | 14 | Yanganoo | 8,420 | 3.1 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 465 | 526 |
| Low | 1 | Gabanintha | 7,447 | 2.7 | 0 | 7 | 100 | 0 | 0 | 0 | 14 | 57 | 29 | 308 | 372 |
| Low | 12 | Kalli | 21,721 | 8.0 | 0 | 8 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 1,019 | 1,086 |
| Low | 7 | Nerramyne | 19,081 | 7.0 | 0 | 12 | 100 | 0 | 0 | 0 | 83 | 17 | 0 | 866 | 954 |
| Low | 1 | Norie | 9,317 | 3.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 430 | 466 |
| Negligible | 11 | Joseph | 11,842 | 4.4 | 0 | 16 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 237 | 237 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | No. of traverse points | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) | Pcc (dse) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | (from table 2) | |
| High | 14,280 | 5.2 | 69 | 27 | 52 | 40 | 4 | 4 | 44 | 37 | 19 | 1,445 | 2,040 |
| Moderately high | 94,186 | 34.7 | 547 | 107 | 84 | 7 | 5 | 4 | 15 | 45 | 40 | 6,356 | 7,849 |
| Moderate | 93,881 | 34.5 | 0 | 70 | 93 | 6 | 0 | 1 | 33 | 40 | 27 | 5,283 | 5,868 |
| Low | 57,566 | 21.2 | 0 | 27 | 100 | 0 | 0 | 0 | 56 | 37 | 7 | 2,623 | 2,878 |
| Negligible | 11,842 | 4.4 | 0 | 16 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 237 | 237 |
| **Total** | 271,755 | 100.0 | 616 | 247 | 87 | 9 | 2 | 2 | 33 | 39 | 28 | 15,944 | 18,872 |
| **Survey average for land systems on this station** | | | | | 94 | 4 | 1 | ^0 | 38 | 35 | 27 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 616 (0.2% of station) |
| Number of traverse points | 247 (includes 18 points from the Murchison rangeland survey) |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 87 |
| % minor | 9 |
| % moderate | 2 |
| % severe | 2 |
| Perennial vegetation | |
| % good | 33 |
| % fair | 39 |
| % poor | 28 |
| ! Suggested carrying capacity (dse) over summer, following an effective winter season | 15,940 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 18,870 |

! The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# GIDGEE STATION

## PASTORAL LEASE 3114/849 + GRAZING RIGHTS ON RESERVE 17437

**Area:** About 112,681 ha (legal); 112,640 ha (computed)

**Area surveyed:** 118,820 ha (whole station plus reserve 17347)

**Land Conservation District:** Sandstone

**Shire(s):** Sandstone; Wiluna

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 598 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 5 | 18,777 | 15.8 |
| 4 | Breakaways and stony plains | 2 | 11,336 | 9.5 |
| 6 | Granite plains and rises | 1 | 952 | 0.8 |
| 7 | Undulating acacia country | 1 | 11,632 | 9.8 |
| 8 | Chenopod plains and low rises | 1 | 1,352 | 1.1 |
| 9 | Stony non-chenopod plains | 2 | 6,466 | 5.4 |
| 10 | Spinifex sandplains | 1 | 13,476 | 11.3 |
| 12 | Acacia sandplains | 1 | 5,186 | 4.4 |
| 13 | Mulga hardpan plains | 3 | 39,439 | 33.2 |
| 14 | Mulga plains with some wanderrie | 1 | 5,780 | 4.9 |
| 15 | Chenopod washplains | 2 | 2,400 | 2.0 |
| 16 | Sandy acacia plains with wanderrie | 1 | 716 | 0.6 |
| 17 | Chenopod alluvial plains | 1 | 1,307 | 1.1 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | Scc* (dse) | Pcc** (dse) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | | |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 17 | Ero | 1,307 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 133 | 187 |
| Mod. high | 8 | Gransal | 1,352 | 1.1 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 0 | 33 | 100 | 113 |
| Mod. high | 15 | Monitor | 1,244 | 1.0 | 0 | 3 | 33 | 67 | 0 | 0 | 0 | 33 | 67 | 76 | 104 |
| Mod. high | 4 | Sherwood | 10,146 | 8.5 | 39 | 8 | 100 | 0 | 0 | 0 | 63 | 12 | 25 | 733 | 846 |
| Mod. high | 15 | Tango | 1,156 | 1.0 | 0 | 4 | 50 | 25 | 25 | 0 | 25 | 0 | 75 | 72 | 96 |
| Mod. high | 1 | Wiluna | 274 | 0.2 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 22 | 23 |
| Moderate | 16 | Ararak | 716 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 45 |
| Moderate | 6 | Challenge | 952 | 0.8 | 0 | 8 | 100 | 0 | 0 | 0 | 63 | 37 | 0 | 57 | 60 |
| Moderate | 9 | Felix | 5,404 | 4.5 | 9 | 7 | 100 | 0 | 0 | 0 | 71 | 29 | 0 | 326 | 338 |
| Moderate | 13 | Jundee | 30,803 | 25.9 | 457 | 32 | 100 | 0 | 0 | 0 | 88 | 9 | 3 | 1,872 | 1,925 |
| Moderate | 13 | Rainbow | 8,108 | 6.8 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 0 | 50 | 450 | 507 |
| Moderate | 7 | Violet | 11,632 | 9.8 | 0 | 14 | 79 | 21 | 0 | 0 | 57 | 7 | 36 | 669 | 727 |
| Moderate | 4 | Waguin | 1,190 | 1.0 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 74 | 74 |
| Moderate | 9 | Windarra | 1,062 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 66 |
| Moderate | 13 | Woodline | 528 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 33 |
| Moderate | 14 | Yanganoo | 5,780 | 4.9 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 319 | 361 |
| Low | 1 | Bevon | 13,551 | 11.4 | 0 | 7 | 100 | 0 | 0 | 0 | 57 | 14 | 29 | 619 | 678 |
| Low | 1 | Gabanintha | 3,266 | 2.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 141 | 163 |
| Low | 12 | Kalli | 5,186 | 4.4 | 0 | 4 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 233 | 259 |
| Low | 1 | Teutonic | 400 | 0.3 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 16 | 20 |
| Very low | 1 | Brooking | 1,286 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 43 |
| Very low | 10 | Bullimore | 13,476 | 11.3 | 0 | 6 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 449 | 449 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 1,307 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 133 | 187 |
| Moderately high | 14,172 | 11.9 | 39 | 21 | 81 | 14 | 5 | 0 | 48 | 14 | 38 | 1,003 | 1,181 |
| Moderate | 66,176 | 55.7 | 466 | 68 | 96 | 4 | 0 | 0 | 77 | 13 | 10 | 3,896 | 4,136 |
| Low | 22,402 | 18.9 | 0 | 12 | 100 | 0 | 0 | 0 | 50 | 33 | 17 | 1,010 | 1,120 |
| Very low | 14,763 | 12.4 | 0 | 6 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 490 | 492 |
| **Total** | 118,820 | 100.0 | 505 | 107 | 93 | 6 | 1 | 0 | 69 | 15 | 16 | 6,532 | 7,116 |
| **Survey average for land systems on this station** | | | | | 94 | 4 | 1 | ^0 | 41 | 22 | 37 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 505 (0.4% of area surveyed) |
| Number of traverse points | 107 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 93 |
| % minor | 6 |
| % moderate | 1 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 69 |
| % fair | 15 |
| % poor | 16 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 6,530 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 7,110 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# HILLVIEW STATION (PART ONLY)

## PASTORAL LEASE 3114/584

**Area:** About 148,609 ha (legal)

**Area surveyed:** 64,244 ha (about 43% of station)

**Land Conservation District:** Meekatharra

**Shire(s):** Meekatharra

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 609 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 3 | 895 | 1.4 |
| 4 | Breakaways and stony plains | 2 | 4,896 | 7.6 |
| 5 | Breakaways and chenopod plains | 1 | 240 | 0.4 |
| 6 | Granite plains and rises | 1 | 194 | 0.3 |
| 7 | Undulating acacia country | 1 | 231 | 0.4 |
| 9 | Stony non-chenopod plains | 2 | 310 | 0.5 |
| 10 | Spinifex sandplains | 1 | 13,622 | 21.2 |
| 12 | Acacia sandplains | 1 | 1,319 | 2.1 |
| 13 | Mulga hardpan plains | 4 | 14,401 | 22.4 |
| 14 | Mulga plains with some wanderrie | 1 | 22,492 | 35.0 |
| 16 | Sandy acacia plains with wanderrie | 1 | 1,024 | 1.6 |
| 17 | Chenopod alluvial plains | 2 | 1,982 | 3.1 |
| 18 | Calcreted old drainage systems | 1 | 2,640 | 4.1 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 5 | Gumbreak | 240 | 0.4 | 124 | 1 | 0 | 0 | 100 | 0 | 0 | 0 | 100 | 7 | 34 |
| High | 18 | Mileura | 2,640 | 4.1 | 0 | 8 | 88 | 12 | 0 | 0 | 0 | 12 | 88 | 177 | 377 |
| High | 17 | Steer | 222 | 0.3 | 30 | 1 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 12 | 32 |
| Mod. high | 4 | Sherwood | 4,482 | 7.0 | 9 | 10 | 70 | 10 | 20 | 0 | 30 | 30 | 40 | 307 | 374 |
| Mod. high | 17 | Wilson | 1,759 | 2.7 | 0 | 13 | 69 | 23 | 8 | 0 | 31 | 38 | 31 | 123 | 147 |
| Moderate | 16 | Ararak | 1,024 | 1.6 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 60 | 64 |
| Moderate | 6 | Challenge | 194 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 12 |
| Moderate | 9 | Felix | 41 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |
| Moderate | 13 | Jundee | 2,944 | 4.6 | 0 | 11 | 91 | 9 | 0 | 0 | 9 | 27 | 64 | 155 | 184 |
| Moderate | 13 | Ranch | 1,314 | 2.0 | 11 | 3 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 79 | 82 |
| Moderate | 7 | Violet | 231 | 0.4 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 12 | 14 |
| Moderate | 4 | Waguin | 414 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 26 |
| Moderate | 13 | Woodline | 7,669 | 11.9 | 0 | 11 | 100 | 0 | 0 | 0 | 27 | 27 | 46 | 421 | 479 |
| Moderate | 13 | Yalluwin | 2,475 | 3.9 | 368 | 3 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 105 | 155 |
| Moderate | 14 | Yanganoo | 22,492 | 35.0 | 61 | 39 | 97 | 3 | 0 | 0 | 31 | 38 | 31 | 1,256 | 1,406 |
| Low | 1 | Bevon | 112 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 6 |
| Low | 1 | Gabanintha | 782 | 1.2 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 31 | 39 |
| Low | 12 | Kalli | 1,319 | 2.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 66 |
| Low | 1 | Naluthanna | ^0 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Low | 9 | Yarrameedie | 269 | 0.4 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 13 | 13 |
| Very low | 10 | Bullimore | 13,622 | 21.2 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 447 | 454 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 3,102 | 4.8 | 154 | 10 | 70 | 20 | 10 | 0 | 0 | 10 | 90 | 196 | 443 |
| Moderately high | 6,242 | 9.7 | 9 | 23 | 70 | 17 | 13 | 0 | 30 | 35 | 35 | 431 | 520 |
| Moderate | 38,796 | 60.4 | 440 | 70 | 93 | 7 | 0 | 0 | 27 | 33 | 40 | 2,125 | 2,425 |
| Low | 2,482 | 3.9 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 112 | 124 |
| Very low | 13,622 | 21.2 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 447 | 454 |
| **Total** | 64,244 | 100.0 | 603 | 108 | 86 | 10 | 4 | 0 | 27 | 31 | 42 | 3,311 | 3,966 |
| **Survey average for land systems on this station** | | | | | 95 | 3 | 1 | ^0 | 41 | 32 | 27 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

**Station summary (part only)**

| | |
|---|---|
| Severely degraded and eroded (ha) | 603 |
| Number of traverse points | 108 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 86 |
| % minor | 10 |
| % moderate | 4 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 27 |
| % fair | 31 |
| % poor | 42 |
| ¦ Suggested carrying capacity (dse) over summer, following an effective winter season | 3,310 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 3,970 |

¦ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# IOWNA STATION

## PASTORAL LEASE 3114/505

**Area:** About 60,613 ha (legal); 60,513 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Mt Magnet

**Shire(s):** Mt Magnet

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 54 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 4 | Breakaways and stony plains | 2 | 11,123 | 18.4 |
| 10 | Spinifex sandplains | 1 | 24,080 | 39.8 |
| 12 | Acacia sandplains | 1 | 4,793 | 7.9 |
| 13 | Mulga hardpan plains | 1 | 8,361 | 13.8 |
| 16 | Sandy acacia plains with wanderrie | 1 | 12,157 | 20.1 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Mod. high | 4 | Sherwood | 6,994 | 11.6 | 0 | 10 | 90 | 0 | 10 | 0 | 10 | 10 | 80 | 419 | 583 |
| Moderate | 4 | Waguin | 4,128 | 6.8 | 0 | 16 | 94 | 0 | 6 | 0 | 25 | 31 | 44 | 226 | 258 |
| Moderate | 13 | Woodline | 8,361 | 13.8 | 0 | 19 | 100 | 0 | 0 | 0 | 0 | 16 | 84 | 425 | 523 |
| Low | 12 | Kalli | 4,793 | 7.9 | 0 | 5 | 100 | 0 | 0 | 0 | 20 | 60 | 20 | 201 | 240 |
| Low | 16 | Yowie | 12,157 | 20.1 | 0 | 21 | 100 | 0 | 0 | 0 | 19 | 33 | 48 | 509 | 608 |
| Very low | 10 | Marmion | 24,080 | 39.8 | 0 | 18 | 100 | 0 | 0 | 0 | 67 | 22 | 11 | 765 | 803 |

^

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | Scc (dse) | Pcc (dse) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | |
| Moderately high | 6,994 | 11.6 | 0 | 10 | 90 | 0 | 10 | 0 | 10 | 10 | 80 | 419 | 583 |
| Moderate | 12,489 | 20.6 | 0 | 35 | 97 | 0 | 3 | 0 | 11 | 23 | 66 | 652 | 781 |
| Low | 16,950 | 28.0 | 0 | 26 | 100 | 0 | 0 | 0 | 19 | 39 | 42 | 711 | 848 |
| Very low | 24,080 | 39.8 | 0 | 18 | 100 | 0 | 0 | 0 | 67 | 22 | 11 | 765 | 803 |
| **Total** | 60,513 | 100.0 | 0 | 89 | 98 | 0 | 2 | 0 | 25 | 26 | 49 | 2,547 | 3,015 |
| **Survey average for land systems on this station** | | | | | 98 | 1 | ^0 | ^0 | 48 | 33 | 19 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

**Station summary**

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 89 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 98 |
| % minor | 0 |
| % moderate | 2 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 25 |
| % fair | 26 |
| % poor | 49 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 2,550 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 3,020 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# JIBBERDING STATION

## PASTORAL LEASE 3114/869

**Area:** About 4,438 ha (legal); 4,480 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Dalwallinu

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 0 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 11 | Sandplains with dense mixed shrublands | 1 | 3,379 | 75.4 |
| 19 | Plains with eucalypt woodlands | 1 | 91 | 2.0 |
| 20 | Lake country | 1 | 1,010 | 22.6 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 1,010 | 22.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 124 | 144 |
| Mod. high | 19 | Doney | 91 | 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 8 |
| Negligible | 11 | Joseph | 3,379 | 75.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 68 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 1,010 | 22.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 124 | 144 |
| Moderately high | 91 | 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 8 |
| Negligible | 3,379 | 75.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 68 |
| **Total** | 4,480 | 100.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 199 | 220 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 68 | 24 | 8 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 0 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 0 |
| % minor | 0 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 0 |
| % fair | 0 |
| % poor | 0 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 200 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 220 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# KADJI KADJI STATION

## PASTORAL LEASE 3114/1245

**Area:** About 46,915 ha (legal); 46,974 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Morawa

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 73 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 318 | 0.7 |
| 4 | Breakaways and stony plains | 1 | 2,468 | 5.3 |
| 6 | Granite plains and rises | 1 | 413 | 0.9 |
| 7 | Undulating acacia country | 1 | 4,496 | 9.6 |
| 8 | Chenopod plains and low rises | 1 | 64 | 0.1 |
| 11 | Sandplains with dense mixed shrublands | 1 | 8,080 | 17.2 |
| 13 | Mulga hardpan plains | 1 | 2,783 | 5.9 |
| 16 | Sandy acacia plains with wanderrie | 1 | 6,867 | 14.6 |
| 19 | Plains with eucalypt woodlands | 2 | 6,938 | 14.8 |
| 20 | Lake country | 1 | 14,221 | 30.3 |
| | Cleared land | - | 327 | 0.7 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 12,343 | 26.3 | 0 | 12 | 100 | 0 | 0 | 0 | 75 | 8 | 17 | 1,552 | 1,763 |
| Mod. high | 19 | Doney | 458 | 1.0 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 38 | 38 |
| Mod. high | 4 | Euchre | 2,468 | 5.3 | 0 | 4 | 75 | 25 | 0 | 0 | 50 | 25 | 25 | 181 | 206 |
| Mod. high | 8 | Moriarty | 64 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 |
| Mod. high | 13 | Tindalarra | 2,783 | 5.9 | 0 | 5 | 100 | 0 | 0 | 0 | 60 | 40 | 0 | 219 | 232 |
| Moderate | 6 | Challenge | 413 | 0.9 | 0 | 4 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 25 | 26 |
| Moderate | 19 | Pindar | 6,480 | 13.8 | 0 | 14 | 100 | 0 | 0 | 0 | 79 | 21 | 0 | 396 | 405 |
| Low | 1 | Gabanintha | 318 | 0.7 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 16 | 16 |
| Low | 7 | Nerramyne | 4,496 | 9.6 | 0 | 15 | 100 | 0 | 0 | 0 | 80 | 13 | 7 | 216 | 225 |
| Low | 16 | Yowie | 6,867 | 14.6 | 0 | 10 | 100 | 0 | 0 | 0 | 80 | 20 | 0 | 330 | 343 |
| Negligible | 11 | Joseph | 8,080 | 17.2 | 0 | 13 | 100 | 0 | 0 | 0 | 77 | 8 | 15 | 162 | 162 |
| Nil | 20 | Lake bed | 1,878 | 4.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cultivated land | | | 327 | 0.7 | | | | | | | | | | 981 | 981 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 12,343 | 26.2 | 0 | 12 | 100 | 0 | 0 | 0 | 75 | 8 | 17 | 1,552 | 1,763 |
| Moderately high | 5,772 | 12.3 | 0 | 10 | 90 | 10 | 0 | 0 | 60 | 30 | 10 | 443 | 481 |
| Moderate | 6,893 | 14.7 | 0 | 18 | 100 | 0 | 0 | 0 | 78 | 22 | 0 | 421 | 431 |
| Low | 11,681 | 24.9 | 0 | 26 | 100 | 0 | 0 | 0 | 81 | 15 | 4 | 561 | 584 |
| Negligible | 8,080 | 17.2 | 0 | 13 | 100 | 0 | 0 | 0 | 77 | 8 | 15 | 162 | 162 |
| Nil | 1,878 | 4.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cultivated land | 327 | 0.7 | | | | | | | | | | 981 | 981 |
| **Total** | 46,974 | 100.0 | 0 | 79 | 99 | 1 | 0 | 0 | 76 | 16 | 8 | 4,120 | 4,402 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 47 | 35 | 18 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 79 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 99 |
| % minor | 1 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 76 |
| % fair | 16 |
| % poor | 8 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 4,120 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 4,400 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# KALUWIRI STATION

## PASTORAL LEASE 3114/1232

**Area:** About 297,089 ha (legal); 297,637 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Leonora; Sandstone; Wiluna

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease =†1,083†ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 4 | 2,937 | 1.0 |
| 4 | Breakaways and stony plains | 2 | 27,342 | 9.2 |
| 5 | Breakaways and chenopod plains | 1 | 717 | 0.2 |
| 6 | Granite plains and rises | 1 | 2,129 | 0.7 |
| 8 | Chenopod plains and low rises | 1 | 1,751 | 0.6 |
| 9 | Stony non-chenopod plains | 1 | 3,020 | 1.0 |
| 10 | Spinifex sandplains | 1 | 197,689 | 66.4 |
| 12 | Acacia sandplains | 1 | 2,631 | 0.9 |
| 13 | Mulga hardpan plains | 3 | 3,400 | 1.1 |
| 14 | Mulga plains with some wanderrie | 2 | 49,970 | 16.8 |
| 16 | Sandy acacia plains with wanderrie | 1 | 2,239 | 0.8 |
| 17 | Chenopod alluvial plains | 2 | 253 | 0.1 |
| 18 | Calcreted old drainage systems | 3 | 3,082 | 1.0 |
| 20 | Lake country | 1 | 477 | 0.2 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 477 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 68 |
| High | 17 | Cyclops | 252 | 0.1 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 14 | 16 |
| High | 5 | Gumbreak | 717 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 102 |
| High | 18 | Mileura | 773 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 110 |
| High | 17 | Roderick | 1 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mod. high | 18 | Cunyu | 907 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 76 |
| Mod. high | 8 | Gransal | 1,751 | 0.6 | 0 | 5 | 100 | 0 | 0 | 0 | 60 | 40 | 0 | 138 | 146 |
| Mod. high | 4 | Sherwood | 23,790 | 8.0 | 136 | 13 | 92 | 8 | 0 | 0 | 92 | 0 | 8 | 1,719 | 1,983 |
| Moderate | 6 | Challenge | 2,129 | 0.7 | 95 | 5 | 40 | 40 | 0 | 20 | 0 | 20 | 80 | 104 | 133 |
| Moderate | 18 | Cosmo | 1,402 | 0.5 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 82 | 88 |
| Moderate | 16 | Desdemona | 2,239 | 0.8 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 118 | 140 |
| Moderate | 13 | Hamilton | 1,132 | 0.4 | 0 | 6 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 60 | 71 |
| Moderate | 13 | Jundee | 752 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 47 |
| Moderate | 14 | Monk | 9,186 | 3.1 | 0 | 10 | 80 | 20 | 0 | 0 | 0 | 10 | 90 | 464 | 574 |
| Moderate | 4 | Waguin | 3,552 | 1.2 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 209 | 222 |
| Moderate | 9 | Windarra | 3,020 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 163 | 189 |
| Moderate | 13 | Woodline | 1,516 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 | 95 |
| Moderate | 14 | Yanganoo | 40,784 | 13.7 | 0 | 29 | 93 | 7 | 0 | 0 | 27 | 14 | 59 | 2,250 | 2,549 |
| Low | 1 | Bevon | 55 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |
| Low | 1 | Gabanintha | 372 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 19 |
| Low | 12 | Kalli | 2,631 | 0.9 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 123 | 132 |
| Very low | 1 | Brooking | 1,627 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 54 |
| Very low | 10 | Bullimore | 197,689 | 66.4 | 0 | 72 | 100 | 0 | 0 | 0 | 93 | 3 | 4 | 6,524 | 6,590 |
| Very low | 1 | Wyarri | 883 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 29 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 2,220 | 0.8 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 226 | 297 |
| Moderately high | 26,448 | 8.9 | 136 | 18 | 94 | 6 | 0 | 0 | 83 | 11 | 6 | 1,913 | 2,204 |
| Moderate | 65,712 | 22.1 | 95 | 56 | 87 | 11 | 0 | 2 | 18 | 20 | 62 | 3,578 | 4,107 |
| Low | 3,058 | 1.0 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 141 | 153 |
| Very low | 200,199 | 67.2 | 0 | 72 | 100 | 0 | 0 | 0 | 93 | 3 | 4 | 6,602 | 6,673 |
| **Total** | 297,637 | 100.0 | 231 | 148 | 95 | 4 | 0 | 1 | 63 | 10 | 27 | 12,460 | 13,434 |
| **Survey average for land systems on this station** | | | | | 95 | 4 | 1 | ^0 | 42 | 32 | 26 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

**Station summary**

| | |
|---|---|
| Severely degraded and eroded (ha) | 231 (< 0.1% station) |
| Number of traverse points | 148 (includes 84 points from the NE Goldfields rangeland survey) |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 95 |
| % minor | 4 |
| % moderate | 0 |
| % severe | 1 |
| Perennial vegetation | |
| % good | 63 |
| % fair | 10 |
| % poor | 27 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 12,460 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 13,430 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# KARARA STATION

## PASTORAL LEASE 3114/886

**Area:** About 109,291 ha (legal); 109,170 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Perenjori

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease =†1,113†ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 3 | 1,190 | 1.1 |
| 2 | Hills with mixed shrublands | 2 | 8,248 | 7.5 |
| 3 | Hills with chenopods | 1 | 4,525 | 4.1 |
| 4 | Breakaways and stony plains | 2 | 4,961 | 4.5 |
| 6 | Granite plains and rises | 2 | 9,823 | 9.0 |
| 7 | Undulating acacia country | 2 | 4,874 | 4.5 |
| 8 | Chenopod plains and low rises | 1 | 5,922 | 5.4 |
| 11 | Sandplains with dense mixed shrublands | 1 | 17,159 | 15.7 |
| 13 | Mulga hardpan plains | 1 | 479 | 0.4 |
| 16 | Sandy acacia plains with wanderrie | 2 | 20,805 | 19.1 |
| 17 | Chenopod alluvial plains | 1 | 5,002 | 4.6 |
| 18 | Calcreted old drainage systems | 2 | 1,058 | 1.0 |
| 19 | Plains with eucalypt woodlands | 2 | 20,499 | 18.8 |
| 20 | Lake country | 1 | 4,226 | 3.9 |
| | Cleared land | - | 399 | 0.4 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | Scc* (dse) | Pcc** (dse) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | | | |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | | |
| High | 20 | Carnegie | 2,946 | 278 | 0 | 7 | 100 | 0 | 0 | 0 | 57 | 29 | 14 | | 351 | 421 |
| High | 18 | Mileura | 811 | 0.8 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | | 51 | 116 |
| Mod. high | 17 | Campsite | 5,002 | 4.6 | 0 | 7 | 100 | 0 | 0 | 0 | 0 | 71 | 29 | | 334 | 417 |
| Mod. high | 18 | Cunyu | 247 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 15 | 21 |
| Mod. high | 19 | Doney | 3,070 | 2.8 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | | 219 | 256 |
| Mod. high | 4 | Euchre | 4,853 | 4.4 | 0 | 13 | 100 | 0 | 0 | 0 | 62 | 38 | 0 | | 382 | 404 |
| Mod. high | 3 | Graves | 4,525 | 4.1 | 0 | 6 | 100 | 0 | 0 | 0 | 0 | 83 | 17 | | 311 | 377 |
| Mod. high | 8 | Moriarty | 5,922 | 5.4 | 0 | 11 | 100 | 0 | 0 | 0 | 27 | 64 | 9 | | 434 | 494 |
| Mod. high | 13 | Tindalarra | 479 | 0.4 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 0 | 50 | | 33 | 40 |
| Moderate | 6 | Bandy | 396 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 24 | 25 |
| Moderate | 6 | Challenge | 9,427 | 8.6 | 0 | 6 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | | 530 | 589 |
| Moderate | 19 | Pindar | 17,429 | 16.0 | 0 | 20 | 100 | 0 | 0 | 0 | 30 | 40 | 30 | | 976 | 1,089 |
| Moderate | 7 | Violet | ^0 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Moderate | 4 | Waguin | 108 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 7 | 7 |
| Low | 1 | Gabanintha | 688 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 30 | 34 |
| Low | 7 | Nerramyne | 4,874 | 4.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 221 | 244 |
| Low | 1 | Norie | 380 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 18 | 19 |
| Low | 2 | Singleton | 3,469 | 3.0 | 0 | 6 | 100 | 0 | 0 | 0 | 33 | 67 | 0 | | 150 | 173 |
| Low | 16 | Tealtoo | 7,795 | 7.2 | 0 | 22 | 100 | 0 | 0 | 0 | 32 | 55 | 13 | | 337 | 390 |
| Low | 16 | Yowie | 13,010 | 11.9 | 0 | 15 | 100 | 0 | 0 | 0 | 33 | 33 | 34 | | 563 | 651 |
| Very low | 2 | Tallering | 4,779 | 4.5 | 0 | 10 | 100 | 0 | 0 | 0 | 80 | 20 | 0 | | 155 | 159 |
| Very low | 1 | Watson | 122 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 4 | 4 |
| Negligible | 11 | Joseph | 17,159 | 15.7 | 0 | 28 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | | 343 | 343 |
| Nil | 20 | Lake bed | 1,280 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Cultivated land | | | 399 | 0.4 | | | | | | | | | | | 1,197 | 1,197 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) | Pcc (dse) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | (from table 2) | |
| High | 3,757 | 3.4 | 0 | 9 | 100 | 0 | 0 | 0 | 45 | 22 | 33 | 396 | 522 |
| Moderately high | 24,098 | 22.1 | 0 | 43 | 100 | 0 | 0 | 0 | 28 | 60 | 12 | 1,674 | 1,944 |
| Moderate | 27,360 | 25.0 | 0 | 26 | 100 | 0 | 0 | 0 | 35 | 42 | 23 | 1,407 | 1,566 |
| Low | 30,215 | 27.7 | 0 | 43 | 100 | 0 | 0 | 0 | 32 | 49 | 19 | 1,305 | 1,494 |
| Very low | 4,902 | 4.5 | 0 | 10 | 100 | 0 | 0 | 0 | 63 | 37 | 0 | 159 | 163 |
| Negligible | 17,159 | 15.7 | 0 | 28 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 331 | 331 |
| Nil | 1,280 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cultivated land | 399 | 0.4 | | | | | | | | | | 1,197 | 1,197 |
| **Total** | 104,947 | 100.0 | 0 | 159 | 100 | 0 | 0 | 0 | 43 | 43 | 14 | 6,685 | 7,469 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 46 | 34 | 20 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 159 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 100 |
| % minor | 0 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 43 |
| % fair | 43 |
| % poor | 14 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 6,690 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 7,470 |

ǂ *The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed* for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# KIRKALOCKA STATION

## PASTORAL LEASE 3114/636

**Area:** About 75,913 ha (legal); 75,972 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Mt Magnet

**Shire(s):** Mt Magnet

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease= 393 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 3 | 2,006 | 2.6 |
| 4 | Breakaways and stony plains | 1 | 12,388 | 16.3 |
| 6 | Granite plains and rises | 2 | 3,101 | 4.1 |
| 7 | Undulating acacia country | 1 | 107 | 0.1 |
| 8 | Chenopod plains and low rises | 2 | 1,449 | 1.9 |
| 10 | Spinifex sandplains | 1 | 13,399 | 17.6 |
| 12 | Acacia sandplains | 1 | 4,832 | 6.4 |
| 13 | Mulga hardpan plains | 1 | 36,417 | 47.9 |
| 16 | Sandy acacia plains with wanderrie | 1 | 541 | 0.7 |
| 17 | Chenopod alluvial plains | 1 | 1,730 | 2.3 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 17 | Ero | 1,730 | 2.3 | 316 | 4 | 50 | 0 | 50 | 0 | 0 | 0 | 100 | 88 | 247 |
| Mod. high | 8 | Gransal | 663 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 55 |
| Mod. high | 8 | Nallex | 786 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 66 |
| Mod. high | 4 | Sherwood | 12,388 | 16.3 | 192 | 19 | 89 | 0 | 11 | 0 | 0 | 47 | 53 | 770 | 1,032 |
| Moderate | 6 | Bandy | 641 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 40 |
| Moderate | 6 | Challenge | 2,460 | 3.2 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 67 | 33 | 132 | 154 |
| Moderate | 7 | Violet | 107 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 7 |
| Moderate | 13 | Woodline | 36,417 | 47.9 | 0 | 49 | 100 | 0 | 0 | 0 | 8 | 24 | 68 | 1,906 | 2,276 |
| Low | 1 | Gabanintha | 563 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 28 |
| Low | 12 | Kalli | 4,832 | 6.4 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 193 | 242 |
| Low | 1 | Norie | 1,356 | 1.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 63 | 68 |
| Low | 16 | Yowie | 541 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 27 |
| Very low | 1 | Brooking | 87 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Very low | 10 | Marmion | 13,399 | 17.6 | 0 | 10 | 100 | 0 | 0 | 0 | 80 | 20 | 0 | 434 | 447 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 1,730 | 2.3 | 316 | 4 | 50 | 0 | 50 | 0 | 0 | 0 | 100 | 88 | 247 |
| Moderately high | 13,837 | 18.2 | 192 | 19 | 89 | 0 | 11 | 0 | 0 | 47 | 53 | 954 | 1,400 |
| Moderate | 39,626 | 52.2 | 0 | 52 | 100 | 0 | 0 | 0 | 8 | 27 | 65 | 2,082 | 2,477 |
| Low | 7,292 | 9.6 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 304 | 365 |
| Very low | 13,487 | 17.7 | 0 | 10 | 100 | 0 | 0 | 0 | 80 | 20 | 0 | 437 | 450 |
| **Total** | 75,972 | 100.0 | 508 | 89 | 96 | 0 | 4 | 0 | 14 | 28 | 58 | 3,865 | 4,939 |
| **Survey average for land systems on this station** | | | | | 95 | 3 | 1 | ^0 | 43 | 35 | 22 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 508 (0.7% of station) |
| Number of traverse points | 89 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 96 |
| % minor | 0 |
| % moderate | 4 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 14 |
| % fair | 28 |
| % poor | 58 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 3,860 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 4,940 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# LAKE BARLEE STATION

## PASTORAL LEASE 398/509

**Area:** About 127,829 ha (legal); 127,483 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 40 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 4 | Breakaways and stony plains | 2 | 9,756 | 7.7 |
| 5 | Breakaways and chenopod plains | 1 | 2,494 | 2.0 |
| 6 | Granite plains and rises | 2 | 7,450 | 5.8 |
| 8 | Chenopod plains and low rises | 1 | 656 | 0.5 |
| 10 | Spinifex sandplains | 2 | 26,107 | 20.5 |
| 11 | Sandplains with dense mixed shrublands | 1 | 3,495 | 2.7 |
| 16 | Sandy acacia plains with wanderrie | 1 | 51,132 | 40.1 |
| 17 | Chenopod alluvial plains | 1 | 571 | 0.5 |
| 19 | Plains with eucalypt woodlands | 3 | 2,308 | 1.8 |
| 20 | Lake country | 1 | 23,514 | 18.4 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 23,172 | 18.2 | 0 | 33 | 100 | 0 | 0 | 0 | 91 | 6 | 3 | 3,195 | 3,310 |
| High | 5 | Gumbreak | 2,494 | 2.0 | 0 | 4 | 100 | 0 | 0 | 0 | 25 | 0 | 75 | 206 | 356 |
| High | 17 | Joy | 571 | 0.5 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 82 | 82 |
| Mod. high | 19 | Doney | 245 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 20 |
| Mod. high | 4 | Euchre | 5,798 | 4.5 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 460 | 483 |
| Mod. high | 8 | Gransal | 656 | 0.5 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 45 | 55 |
| Moderate | 6 | Bandy | 2,133 | 1.7 | 0 | 4 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 130 | 133 |
| Moderate | 6 | Challenge | 5,318 | 4.2 | 0 | 16 | 100 | 0 | 0 | 0 | 81 | 6 | 13 | 322 | 332 |
| Moderate | 19 | Deadman | 457 | 0.4 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 33 | 34 | 26 | 29 |
| Moderate | 19 | Pindar | 1,606 | 1.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 93 | 100 |
| Moderate | 4 | Waguin | 3,958 | 3.1 | 0 | 6 | 100 | 0 | 0 | 0 | 83 | 17 | 0 | 243 | 247 |
| Low | 11 | Bannar | 3,495 | 2.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 171 | 175 |
| Low | 16 | Yowie | 51,132 | 40.1 | 0 | 45 | 100 | 0 | 0 | 0 | 65 | 24 | 11 | 2,378 | 2,557 |
| Very low | 10 | Marmion | 14,714 | 11.5 | 0 | 23 | 100 | 0 | 0 | 0 | 96 | 4 | 0 | 488 | 490 |
| Very low | 10 | Tyrrell | 11,393 | 8.9 | 0 | 12 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 380 | 380 |
| Nil | 20 | Lake bed | 342 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 26,237 | 20.6 | 0 | 40 | 100 | 0 | 0 | 0 | 85 | 5 | 10 | 3,482 | 3,748 |
| Moderately high | 6,699 | 5.2 | 0 | 5 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 523 | 558 |
| Moderate | 13,471 | 10.6 | 0 | 29 | 100 | 0 | 0 | 0 | 76 | 14 | 10 | 812 | 842 |
| Low | 54,627 | 42.8 | 0 | 45 | 100 | 0 | 0 | 0 | 65 | 24 | 11 | 2,549 | 2,731 |
| Very low | 26,107 | 20.5 | 0 | 35 | 100 | 0 | 0 | 0 | 97 | 3 | 0 | 867 | 870 |
| Nil | 342 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 127,483 | 100.0 | 0 | 154 | 100 | 0 | 0 | 0 | 80 | 12 | 8 | 8,233 | 8,749 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 50 | 34 | 16 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 154 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 100 |
| % minor | 0 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 80 |
| % fair | 12 |
| % poor | 8 |
| ¦ Suggested carrying capacity (dse) over summer, following an effective winter season | 8,230 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 8,750 |

¦ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# LAKE MASON STATION

## PASTORAL LEASE 3114/551

**Area:** About 149,317 ha (legal); 149,318 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 334 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 5 | 11,461 | 7.7 |
| 4 | Breakaways and stony plains | 2 | 10,012 | 6.7 |
| 6 | Granite plains and rises | 2 | 757 | 0.5 |
| 7 | Undulating acacia country | 2 | 3,064 | 2.1 |
| 8 | Chenopod plains and low rises | 1 | 147 | 0.1 |
| 9 | Stony non-chenopod plains | 3 | 2,101 | 1.4 |
| 10 | Spinifex sandplains | 1 | 53,543 | 35.9 |
| 12 | Acacia sandplains | 1 | 2,935 | 2.0 |
| 13 | Mulga hardpan plains | 2 | 5,115 | 3.4 |
| 14 | Mulga plains with some wanderrie | 1 | 23,614 | 15.8 |
| 15 | Chenopod washplains | 2 | 3,265 | 2.2 |
| 18 | Calcreted old drainage systems | 3 | 8,642 | 5.8 |
| 20 | Lake country | 1 | 24,663 | 16.5 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 24,663 | 16.5 | 0 | 38 | 92 | 5 | 0 | 3 | 34 | 37 | 29 | 2,557 | 3,523 |
| High | 18 | Mileura | 1,182 | 0.8 | 12 | 2 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 121 | 169 |
| Mod. high | 18 | Cunyu | 6,562 | 4.4 | 0 | 13 | 92 | 8 | 0 | 0 | 23 | 31 | 46 | 439 | 547 |
| Mod. high | 8 | Gransal | 147 | 0.1 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 8 | 12 |
| Mod. high | 15 | Monitor | 1,075 | 0.7 | 569 | 4 | 25 | 0 | 25 | 50 | 0 | 0 | 100 | 28 | 90 |
| Mod. high | 7 | Nubev | 236 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 20 |
| Mod. high | 4 | Sherwood | 9,324 | 6.2 | 79 | 9 | 78 | 0 | 11 | 11 | 45 | 33 | 22 | 679 | 777 |
| Mod. high | 15 | Tango | 2,189 | 1.5 | 0 | 9 | 78 | 22 | 0 | 0 | 0 | 22 | 78 | 129 | 182 |
| Mod. high | 1 | Wiluna | 5,950 | 4.0 | 186 | 6 | 50 | 17 | 17 | 16 | 0 | 0 | 100 | 320 | 496 |
| Moderate | 6 | Bandy | 85 | 0.1 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 5 | 5 |
| Moderate | 6 | Challenge | 672 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 42 |
| Moderate | 18 | Cosmo | 899 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 56 |
| Moderate | 9 | Felix | 477 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 30 |
| Moderate | 13 | Jundee | 3,487 | 2.3 | 0 | 3 | 33 | 33 | 34 | 0 | 0 | 0 | 100 | 199 | 218 |
| Moderate | 7 | Violet | 2,828 | 1.9 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 170 | 177 |
| Moderate | 4 | Waguin | 688 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 43 |
| Moderate | 9 | Windarra | 1,250 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 78 |
| Moderate | 13 | Woodline | 1,628 | 1.1 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 81 | 102 |
| Moderate | 14 | Yanganoo | 23,614 | 15.8 | 5 | 34 | 97 | 0 | 3 | 0 | 41 | 38 | 21 | 1,351 | 1,476 |
| Low | 1 | Bevon | 726 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 36 |
| Low | 1 | Gabanintha | 4,051 | 2.7 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 175 | 203 |
| Low | 12 | Kalli | 2,935 | 2.0 | 0 | 5 | 100 | 0 | 0 | 0 | 40 | 40 | 20 | 129 | 147 |
| Low | 1 | Norie | 303 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 15 |
| Low | 9 | Yarrameedie | 374 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 19 |
| Very low | 1 | Brooking | 432 | 0.3 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 12 | 14 |
| Very low | 10 | Bullimore | 53,543 | 35.9 | 0 | 34 | 100 | 0 | 0 | 0 | 67 | 12 | 21 | 1,701 | 1,785 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 25,845 | 17.3 | 12 | 40 | 92 | 5 | 0 | 3 | 33 | 34 | 33 | 2,678 | 3,692 |
| Moderately high | 25,483 | 17.1 | 834 | 42 | 73 | 10 | 7 | 10 | 17 | 21 | 62 | 1,620 | 2,124 |
| Moderate | 35,627 | 23.9 | 5 | 45 | 94 | 2 | 4 | 0 | 38 | 31 | 31 | 2,036 | 2,227 |
| Low | 8,389 | 5.6 | 0 | 7 | 100 | 0 | 0 | 0 | 29 | 29 | 42 | 366 | 419 |
| Very low | 53,974 | 36.1 | 0 | 35 | 100 | 0 | 0 | 0 | 66 | 11 | 23 | 1,713 | 1,799 |
| **Total** | 149,318 | 100.0 | 851 | 169 | 90 | 4 | 3 | 3 | 37 | 25 | 38 | 8,413 | 10,261 |
| **Survey average for land systems on this station** | | | | | 95 | 4 | 1 | ^0 | 43 | 31 | 26 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 851 (0.6% station) |
| Number of traverse points | 169 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 90 |
| % minor | 4 |
| % moderate | 3 |
| % severe | 3 |
| Perennial vegetation | |
| % good | 37 |
| % fair | 25 |
| % poor | 38 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 8,410 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 10,260 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# LOCHADA STATION

## PASTORAL LEASE 3114/424

**Area:** About 114,581 ha (legal); 114,634 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Perenjori

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 1,183†ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 1,321 | 1.2 |
| 2 | Hills with mixed shrublands | 1 | 1,323 | 1.2 |
| 3 | Hills with chenopods | 1 | 16 | ^0.0 |
| 4 | Breakaways and stony plains | 2 | 5,214 | 4.5 |
| 6 | Granite plains and rises | 2 | 13,381 | 11.7 |
| 7 | Undulating acacia country | 1 | 2,228 | 1.9 |
| 8 | Chenopod plains and low rises | 1 | 1,323 | 1.2 |
| 11 | Sandplains with dense mixed shrublands | 1 | 35,644 | 31.1 |
| 12 | Acacia sandplains | 1 | 338 | 0.3 |
| 13 | Mulga hardpan plains | 1 | 81 | 0.1 |
| 16 | Sandy acacia plains with wanderrie | 3 | 30,291 | 26.4 |
| 18 | Calcreted old drainage systems | 1 | 506 | 0.4 |
| 19 | Plains with eucalypt woodlands | 2 | 14,030 | 12.2 |
| 20 | Lake country | 1 | 8,938 | 7.8 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 6,986 | 6.1 | 0 | 7 | 100 | 0 | 0 | 0 | 57 | 43 | 0 | 869 | 998 |
| High | 18 | Mileura | 506 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 72 |
| Mod. high | 19 | Doney | 3,205 | 2.8 | 0 | 7 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 267 | 267 |
| Mod. high | 4 | Euchre | 4,843 | 4.2 | 0 | 6 | 100 | 0 | 0 | 0 | 83 | 17 | 0 | 394 | 404 |
| Mod. high | 3 | Graves | 16 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Mod. high | 8 | Moriarty | 1,323 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 110 |
| Mod. high | 13 | Tindalarra | 81 | 0.1 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 6 | 7 |
| Moderate | 6 | Bandy | 3,628 | 3.2 | 0 | 6 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 227 | 227 |
| Moderate | 6 | Challenge | 9,753 | 8.5 | 0 | 6 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 548 | 610 |
| Moderate | 16 | Illaara | 5 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Moderate | 19 | Pindar | 10,826 | 9.4 | 0 | 8 | 100 | 0 | 0 | 0 | 63 | 37 | 0 | 649 | 677 |
| Moderate | 4 | Waguin | 371 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 23 |
| Low | 1 | Gabanintha | 288 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 14 |
| Low | 12 | Kalli | 338 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 17 |
| Low | 7 | Nerramyne | 2,228 | 1.9 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 111 | 111 |
| Low | 1 | Norie | 1,033 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 52 |
| Low | 16 | Tealtoo | 1,561 | 1.4 | 0 | 7 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 78 | 78 |
| Low | 16 | Yowie | 28,724 | 25.1 | 0 | 29 | 100 | 0 | 0 | 0 | 73 | 24 | 3 | 1,359 | 1,436 |
| Very low | 2 | Tallering | 1,323 | 1.2 | 0 | 5 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 44 | 44 |
| Negligible | 11 | Joseph | 35,644 | 31.1 | 0 | 44 | 100 | 0 | 0 | 0 | 93 | 5 | 2 | 713 | 713 |
| Nil | 20 | Lake bed | 1,952 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 7,492 | 6.5 | 0 | 7 | 100 | 0 | 0 | 0 | 57 | 43 | 0 | 921 | 1,070 |
| Moderately high | 9,467 | 8.3 | 0 | 14 | 100 | 0 | 0 | 0 | 86 | 14 | 0 | 764 | 789 |
| Moderate | 24,583 | 21.4 | 0 | 20 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 1,446 | 1,536 |
| Low | 34,173 | 29.8 | 0 | 38 | 100 | 0 | 0 | 0 | 79 | 18 | 3 | 1,624 | 1,709 |
| Very low | 1,323 | 1.2 | 0 | 5 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 44 | 44 |
| Negligible | 35,644 | 31.1 | 0 | 44 | 100 | 0 | 0 | 0 | 93 | 5 | 2 | 713 | 713 |
| Nil | 1,952 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 114,634 | 100.0 | 0 | 128 | 100 | 0 | 0 | 0 | 83 | 15 | 2 | 5,512 | 5,861 |
| **Survey average for land systems on this station** | | | | | 96 | 2 | 1 | ^0 | 49 | 34 | 17 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 128 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 100 |
| % minor | 0 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 83 |
| % fair | 15 |
| % poor | 2 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 5,510 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 5,860 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# MARANALGO STATION

## PASTORAL LEASE 3114/1250

**Area:** About 68,849 ha (legal); 68,276 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Sandstone; Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 99 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 4 | Breakaways and stony plains | 3 | 12,580 | 18.4 |
| 7 | Undulating acacia country | 1 | 28 | ^0.0 |
| 11 | Sandplains with dense mixed shrublands | 1 | 1,089 | 1.6 |
| 12 | Acacia sandplains | 1 | 506 | 0.7 |
| 13 | Mulga hardpan plains | 4 | 10,488 | 15.4 |
| 16 | Sandy acacia plains with wanderrie | 1 | 27,863 | 40.8 |
| 18 | Calcreted old drainage systems | 2 | 4,315 | 6.3 |
| 19 | Plains with eucalypt woodlands | 1 | 2,121 | 3.1 |
| 20 | Lake country | 1 | 9,286 | 13.6 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 8,665 | 12.7 | 0 | 19 | 68 | 16 | 11 | 5 | 0 | 47 | 53 | 694 | 1,238 |
| High | 18 | Mileura | 2,487 | 3.6 | 0 | 8 | 50 | 37 | 13 | 0 | 13 | 50 | 37 | 228 | 355 |
| Mod. high | 19 | Doney | 2,121 | 3.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 159 | 177 |
| Mod. high | 4 | Euchre | 1,344 | 2.0 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 96 | 112 |
| Mod. high | 13 | Tindalarra | 553 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 46 |
| Moderate | 18 | Melaleuca | 1,828 | 2.7 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 102 | 114 |
| Moderate | 4 | Olympic | 11,078 | 16.2 | 0 | 13 | 100 | 0 | 0 | 0 | 23 | 62 | 15 | 624 | 692 |
| Moderate | 13 | Ranch | 2,997 | 4.4 | 0 | 9 | 89 | 11 | 0 | 0 | 0 | 11 | 89 | 152 | 187 |
| Moderate | 7 | Violet | 28 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Moderate | 4 | Waguin | 159 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 10 |
| Moderate | 13 | Woodline | 6,898 | 10.1 | 0 | 16 | 100 | 0 | 0 | 0 | 13 | 56 | 31 | 378 | 431 |
| Moderate | 13 | Yalluwin | 41 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |
| Low | 11 | Bannar | 1,089 | 1.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 54 |
| Low | 12 | Kalli | 506 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 25 |
| Low | 16 | Yowie | 27,863 | 40.8 | 0 | 32 | 100 | 0 | 0 | 0 | 19 | 62 | 19 | 1,167 | 1,393 |
| Nil | 20 | Lake bed | 621 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 11,152 | 16.3 | 0 | 27 | 63 | 22 | 11 | 4 | 4 | 48 | 48 | 922 | 1,593 |
| Moderately high | 4,018 | 5.9 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 292 | 335 |
| Moderate | 23,027 | 33.7 | 0 | 40 | 97 | 3 | 0 | 0 | 13 | 50 | 37 | 1,268 | 1,439 |
| Low | 29,459 | 43.2 | 0 | 32 | 100 | 0 | 0 | 0 | 19 | 62 | 19 | 1,244 | 1,473 |
| Nil | 621 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 68,276 | 100.0 | 0 | 101 | 89 | 7 | 3 | 1 | 12 | 54 | 34 | 3,726 | 4,840 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 48 | 32 | 20 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 101 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 89 |
| % minor | 7 |
| % moderate | 3 |
| % severe | 1 |
| Perennial vegetation | |
| % good | 12 |
| % fair | 54 |
| % poor | 34 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 3,730 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 4,840 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# MEELINE STATION

## PASTORAL LEASE 3114/771

**Area:** About 81,939 ha (legal); 82,005 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Mt Magnet

**Shire(s):** Mt Magnet

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 119 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 1,688 | 2.1 |
| 4 | Breakaways and stony plains | 2 | 11,636 | 14.2 |
| 5 | Breakaways and chenopod plains | 1 | 299 | 0.4 |
| 6 | Granite plains and rises | 2 | 1,294 | 1.6 |
| 7 | Undulating acacia country | 1 | 462 | 0.6 |
| 8 | Chenopod plains and low rises | 2 | 5,104 | 6.2 |
| 10 | Spinifex sandplains | 1 | 2,775 | 3.4 |
| 12 | Acacia sandplains | 1 | 5,485 | 6.7 |
| 13 | Mulga hardpan plains | 3 | 13,531 | 16.5 |
| 14 | Mulga plains with some wanderrie | 1 | 5,070 | 6.2 |
| 16 | Sandy acacia plains with wanderrie | 1 | 8,528 | 10.4 |
| 17 | Chenopod alluvial plains | 2 | 1,393 | 1.7 |
| 18 | Calcreted old drainage systems | 1 | 32 | ^0.0 |
| 20 | Lake country | 1 | 24,709 | 30.1 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Very high | 17 | Merbla | 12 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| High | 20 | Carnegie | 22,542 | 27.5 | 0 | 19 | 89 | 11 | 0 | 0 | 52 | 37 | 11 | 2,664 | 3,220 |
| High | 17 | Steer | 1,381 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 197 |
| Mod. high | 8 | Gransal | 4,189 | 5.1 | 0 | 21 | 90 | 10 | 0 | 0 | 33 | 57 | 10 | 309 | 349 |
| Mod. high | 5 | Hootanui | 299 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 25 |
| Mod. high | 8 | Nallex | 915 | 1.1 | 0 | 6 | 83 | 17 | 0 | 0 | 0 | 50 | 50 | 58 | 76 |
| Mod. high | 7 | Nubev | 462 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 39 |
| Mod. high | 4 | Sherwood | 9,746 | 11.9 | 0 | 8 | 100 | 0 | 0 | 0 | 0 | 87 | 13 | 704 | 812 |
| Moderate | 6 | Bandy | 126 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 |
| Moderate | 6 | Challenge | 1,169 | 1.4 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 62 | 73 |
| Moderate | 13 | Hamilton | 1,855 | 2.3 | 0 | 7 | 86 | 14 | 0 | 0 | 0 | 57 | 43 | 99 | 116 |
| Moderate | 13 | Jundee | 300 | 0.4 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 17 | 19 |
| Moderate | 18 | Melaleuca | 32 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Moderate | 14 | Monk | 5,070 | 6.2 | 0 | 10 | 100 | 0 | 0 | 0 | 30 | 60 | 10 | 289 | 317 |
| Moderate | 4 | Waguin | 1,891 | 2.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 111 | 118 |
| Moderate | 13 | Woodline | 11,377 | 13.9 | 0 | 19 | 100 | 0 | 0 | 0 | 26 | 63 | 11 | 646 | 711 |
| Low | 12 | Kalli | 5,485 | 6.7 | 0 | 8 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 247 | 274 |
| Low | 1 | Naluthanna | 1,688 | 2.1 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 68 | 84 |
| Low | 16 | Yowie | 8,528 | 10.4 | 0 | 14 | 100 | 0 | 0 | 0 | 50 | 43 | 7 | 384 | 426 |
| Very low | 10 | Marmion | 2,775 | 3.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 93 |
| Negligible | 20 | Lake bed | 2,167 | 2.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | Scc (dse) | Pcc (dse) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | (from table 2) | |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Very high | 12 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| High | 23,923 | 29.2 | 0 | 19 | 89 | 11 | 0 | 0 | 52 | 37 | 11 | 2,794 | 3,418 |
| Moderately high | 15,610 | 19.0 | 0 | 35 | 91 | 9 | 0 | 0 | 20 | 63 | 17 | 1,122 | 1,301 |
| Moderate | 21,817 | 26.6 | 0 | 39 | 97 | 3 | 0 | 0 | 21 | 61 | 18 | 1,233 | 1,364 |
| Low | 15,701 | 19.2 | 0 | 25 | 100 | 0 | 0 | 0 | 44 | 40 | 16 | 698 | 785 |
| Very low | 2,775 | 3.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 93 |
| Negligible | 2,167 | 2.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 82,005 | 100.0 | 0 | 118 | 95 | 5 | 0 | 0 | 31 | 53 | 16 | 5,938 | 6,963 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 43 | 34 | 23 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 118 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 95 |
| % minor | 5 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 31 |
| % fair | 53 |
| % poor | 16 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 5,940 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 6,960 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# MELLENBYE STATION

## PASTORAL LEASE 3114/675

**Area:** About 91,385 ha (legal); 91,389 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 8 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 4 | 2,997 | 3.3 |
| 4 | Breakaways and stony plains | 1 | 175 | 0.2 |
| 5 | Breakaways and chenopod plains | 1 | 63 | 0.1 |
| 6 | Granite plains and rises | 2 | 3,285 | 3.6 |
| 7 | Undulating acacia country | 1 | 14,824 | 16.2 |
| 11 | Sandplains with dense mixed shrublands | 1 | 16,585 | 18.1 |
| 12 | Acacia sandplains | 1 | 2,001 | 2.2 |
| 13 | Mulga hardpan plains | 2 | 16,274 | 17.8 |
| 16 | Sandy acacia plains with wanderrie | 1 | 19,670 | 21.5 |
| 18 | Calcreted old drainage systems | 1 | 1,838 | 2.0 |
| 19 | Plains with eucalypt woodlands | 2 | 2,068 | 2.3 |
| 20 | Lake country | 1 | 11,043 | 12.1 |
| | Cleared land | - | 567 | 0.6 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 10,621 | 11.6 | 0 | 21 | 100 | 0 | 0 | 0 | 24 | 76 | 0 | 1,171 | 1,517 |
| High | 18 | Mileura | 1,838 | 2.0 | 0 | 6 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 184 | 263 |
| Mod. high | 19 | Doney | 704 | 0.8 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 59 | 59 |
| Mod. high | 4 | Euchre | 175 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 15 |
| Mod. high | 13 | Tindalarra | 14,919 | 16.3 | 315 | 31 | 90 | 3 | 7 | 0 | 7 | 77 | 16 | 1,023 | 1,243 |
| Mod. high | 1 | Wiluna | 1 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mod. high | 5 | Yilgangi | 63 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 |
| Moderate | 6 | Bandy | 92 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 |
| Moderate | 6 | Challenge | 3,193 | 3.5 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 179 | 200 |
| Moderate | 19 | Pindar | 1,363 | 1.5 | 0 | 6 | 100 | 0 | 0 | 0 | 17 | 66 | 17 | 76 | 85 |
| Moderate | 13 | Rainbow | 1,355 | 1.5 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 75 | 85 |
| Low | 1 | Gabanintha | 1,082 | 1.2 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 43 | 54 |
| Low | 12 | Kalli | 2,001 | 2.2 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 94 | 100 |
| Low | 7 | Nerramyne | 14,824 | 16.2 | 0 | 31 | 97 | 3 | 0 | 0 | 26 | 61 | 13 | 632 | 741 |
| Low | 1 | Norie | 1,289 | 1.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 64 |
| Low | 16 | Yowie | 19,670 | 21.5 | 0 | 30 | 100 | 0 | 0 | 0 | 7 | 73 | 20 | 801 | 984 |
| Very low | 1 | Watson | 625 | 0.7 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 18 | 21 |
| Negligible | 11 | Joseph | 16,585 | 18.1 | 0 | 18 | 100 | 0 | 0 | 0 | 72 | 28 | 0 | 332 | 332 |
| Nil | 20 | Lake bed | 422 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cultivated land | | | 567 | 0.6 | | | | | | | | | | 1,701 | 1,701 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 12,458 | 13.6 | 0 | 27 | 100 | 0 | 0 | 0 | 19 | 81 | 0 | 1,355 | 1,780 |
| Moderately high | 15,862 | 17.4 | 315 | 33 | 91 | 3 | 6 | 0 | 12 | 73 | 15 | 1,100 | 1,322 |
| Moderate | 6,004 | 6.6 | 0 | 12 | 100 | 0 | 0 | 0 | 17 | 75 | 8 | 337 | 375 |
| Low | 38,866 | 42.5 | 0 | 64 | 98 | 2 | 0 | 0 | 16 | 68 | 16 | 1,628 | 1,943 |
| Very low | 625 | 0.7 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 18 | 21 |
| Negligible | 16,585 | 18.1 | 0 | 18 | 100 | 0 | 0 | 0 | 72 | 28 | 0 | 332 | 332 |
| Nil | 422 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cultivated land | 567 | 0.6 | | | | | | | | | | 1,701 | 1,701 |
| **Total** | 91,389 | 100.0 | 315 | 156 | 98 | 1 | 1 | 0 | 22 | 67 | 11 | 6,471 | 7,474 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 48 | 34 | 18 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 315 (0.3% of station) |
| Number of traverse points | 156 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 98 |
| % minor | 1 |
| % moderate | 1 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 22 |
| % fair | 67 |
| % poor | 11 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 6,470 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 7,470 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# MOUNT ELVIRE STATION

## PASTORAL LEASE 3114/679

**Area:** About 157,167 ha (legal); 157,235 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Menzies

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 91 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 5,400 | 3.4 |
| 2 | Hills with mixed shrublands | 1 | 3,641 | 2.3 |
| 3 | Hills with chenopods | 1 | 3,014 | 1.9 |
| 4 | Breakaways and stony plains | 2 | 4,197 | 2.7 |
| 5 | Breakaways and chenopod plains | 2 | 1,803 | 1.1 |
| 6 | Granite plains and rises | 2 | 3,180 | 2.0 |
| 8 | Chenopod plains and low rises | 1 | 3,387 | 2.2 |
| 11 | Sandplains with dense mixed shrublands | 1 | 45,650 | 29.0 |
| 16 | Sandy acacia plains with wanderrie | 3 | 21,838 | 13.9 |
| 18 | Calcreted old drainage systems | 1 | 133 | 0.1 |
| 19 | Plains with eucalypt woodlands | 2 | 16,755 | 10.7 |
| 20 | Lake country | 1 | 48,237 | 30.7 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 34,883 | 22.2 | 0 | 46 | 100 | 0 | 0 | 0 | 94 | 4 | 2 | 4,867 | 4,983 |
| High | 5 | Gumbreak | 722 | 0.5 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 88 | 103 |
| Mod. high | 18 | Cunyu | 133 | 0.1 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 11 | 11 |
| Mod. high | 19 | Doney | 11,297 | 6.5 | 0 | 8 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 845 | 941 |
| Mod. high | 4 | Euchre | 3,975 | 2.5 | 0 | 4 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 319 | 331 |
| Mod. high | 3 | Graves | 3,014 | 1.9 | 0 | 12 | 100 | 0 | 0 | 0 | 42 | 58 | 0 | 230 | 251 |
| Mod. high | 8 | Moriarty | 3,387 | 2.2 | 0 | 9 | 100 | 0 | 0 | 0 | 89 | 11 | 0 | 278 | 282 |
| Mod. high | 5 | Yilgangi | 1,081 | 0.7 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 0 | 33 | 80 | 90 |
| Moderate | 6 | Bandy | 2,393 | 1.5 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 150 | 150 |
| Moderate | 6 | Challenge | 786 | 0.5 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 44 | 49 |
| Moderate | 19 | Deadman | 5,458 | 3.5 | 0 | 8 | 100 | 0 | 0 | 0 | 63 | 12 | 25 | 320 | 341 |
| Moderate | 16 | Illaara | 1,052 | 0.7 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 67 | 0 | 61 | 66 |
| Moderate | 4 | Waguin | 223 | 0.1 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 14 | 14 |
| Low | 11 | Bannar | 45,650 | 29.0 | 0 | 52 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 2,283 | 2,283 |
| Low | 16 | Tealtoo | 2,233 | 1.4 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 102 | 112 |
| Low | 16 | Yowie | 18,554 | 11.8 | 0 | 12 | 100 | 0 | 0 | 0 | 92 | 8 | 0 | 835 | 928 |
| Very low | 1 | Brooking | 5,400 | 3.4 | 0 | 12 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 180 | 180 |
| Very low | 2 | Dryandra | 3,641 | 2.3 | 0 | 4 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 117 | 121 |
| Nil | 20 | Lake bed | 13,354 | 8.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 35,605 | 22.6 | 0 | 48 | 100 | 0 | 0 | 0 | 92 | 6 | 2 | 4,955 | 5,086 |
| Moderately high | 22,887 | 14.6 | 0 | 37 | 100 | 0 | 0 | 0 | 67 | 30 | 3 | 1,764 | 1,907 |
| Moderate | 9,912 | 6.3 | 0 | 18 | 100 | 0 | 0 | 0 | 67 | 22 | 11 | 588 | 620 |
| Low | 66,436 | 42.3 | 0 | 66 | 100 | 0 | 0 | 0 | 98 | 2 | 0 | 3,219 | 3,322 |
| Very low | 9,041 | 5.7 | 0 | 16 | 100 | 0 | 0 | 0 | 94 | 6 | 0 | 297 | 301 |
| Nil | 13,354 | 8.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 157,235 | 100.0 | 0 | 185 | 100 | 0 | 0 | 0 | 87 | 11 | 2 | 10,823 | 11,236 |
| **Survey average for land systems on this station** | | | | | 98 | 2 | ^0 | ^0 | 55 | 29 | 16 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 185 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 100 |
| % minor | 0 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 87 |
| % fair | 11 |
| % poor | 2 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 10,820 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 11,240 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# MOUNT GIBSON STATION

## PASTORAL LEASE 398/616 + GRAZING RIGHTS ON RESERVE 17367

**Area:** About 130,800 ha (legal); 130,488 ha (computed)

**Area surveyed:** 144,396 ha (whole station plus reserve 17367)

**Land Conservation District:** Yalgoo

**Shire(s):** Dalwallinu; Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 1,974†ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 5,406 | 3.7 |
| 2 | Hills with mixed shrublands | 2 | 5,487 | 3.8 |
| 4 | Breakaways and stony plains | 2 | 17,489 | 12.1 |
| 6 | Granite plains and rises | 2 | 2,582 | 1.8 |
| 8 | Chenopod plains and low rises | 1 | 7,012 | 4.9 |
| 11 | Sandplains with dense mixed shrublands | 1 | 59,531 | 41.2 |
| 16 | Sandy acacia plains with wanderrie | 2 | 19 | ^0.0 |
| 17 | Chenopod alluvial plains | 1 | 1,004 | 0.7 |
| 19 | Plains with eucalypt woodlands | 2 | 38,581 | 26.7 |
| 20 | Lake country | 1 | 7,285 | 5.0 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 6,087 | 4.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 745 | 870 |
| Mod. high | 17 | Campsite | 1,004 | 0.7 | 0 | 4 | 75 | 25 | 0 | 0 | 0 | 25 | 75 | 60 | 84 |
| Mod. high | 19 | Doney | 14,145 | 9.8 | 0 | 8 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 1,059 | 1,179 |
| Mod. high | 4 | Euchre | 13,931 | 9.6 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 1,105 | 1,161 |
| Mod. high | 8 | Moriarty | 7,012 | 4.9 | 0 | 19 | 100 | 0 | 0 | 0 | 37 | 5 | 58 | 467 | 584 |
| Moderate | 6 | Bandy | 1,763 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 106 | 110 |
| Moderate | 6 | Challenge | 819 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 51 |
| Moderate | 16 | Illaara | 13 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Moderate | 4 | Olympic | 3,558 | 2.5 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 222 | 222 |
| Moderate | 19 | Pindar | 24,436 | 16.9 | 0 | 13 | 100 | 0 | 0 | 0 | 38 | 62 | 0 | 1,416 | 1,527 |
| Low | 1 | Gabanintha | 5,406 | 3.7 | 0 | 4 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 243 | 270 |
| Low | 2 | Singleton | 4,392 | 3.0 | 0 | 9 | 100 | 0 | 0 | 0 | 56 | 44 | 0 | 200 | 220 |
| Low | 16 | Yowie | 5 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Very low | 2 | Tallering | 1,096 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 37 |
| Negligible | 11 | Joseph | 59,531 | 41.2 | 0 | 15 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 1,191 | 1,191 |
| Nil | 20 | Lake bed | 1,198 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 6,087 | 4.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 745 | 870 |
| Moderately high | 36,091 | 25.0 | 0 | 34 | 97 | 3 | 0 | 0 | 53 | 6 | 41 | 2,691 | 3,008 |
| Moderate | 30,590 | 21.2 | 0 | 17 | 100 | 0 | 0 | 0 | 53 | 47 | 0 | 1,792 | 1,912 |
| Low | 9,803 | 6.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 444 | 490 |
| Very low | 1,096 | 0.8 | 0 | 13 | 100 | 0 | 0 | 0 | 54 | 46 | 0 | 35 | 37 |
| Negligible | 59,531 | 41.2 | 0 | 15 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 1,191 | 1,191 |
| Nil | 1,198 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 144,396 | 100.0 | 0 | 79 | 99 | 1 | 0 | 0 | 62 | 20 | 18 | 6,898 | 7,508 |
| **Survey average for land systems on this station** | | | | | 98 | 1 | ^0 | ^0 | 54 | 33 | 13 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of area surveyed) |
| Number of traverse points | 79 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 99 |
| % minor | 1 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 62 |
| % fair | 20 |
| % poor | 18 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 6,900 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 7,510 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# MOUNT JACKSON STATION (PART ONLY)

## PASTORAL LEASE 3114/639

**Area:** About 160,180 ha (legal)

**Area surveyed:** 23,332 ha (about 15% of station)

**Land Conservation District:** Sandstone

**Shire(s):** Menzies; Yilgarn

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 40 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 19 | 0.1 |
| 4 | Breakaways and stony plains | 1 | 3,947 | 16.9 |
| 8 | Chenopod plains and low rises | 1 | 2,570 | 11.0 |
| 11 | Sandplains with dense mixed shrublands | 1 | 10,204 | 43.7 |
| 16 | Sandy acacia plains with wanderrie | 1 | 2,158 | 9.2 |
| 17 | Chenopod alluvial plains | 1 | 3,456 | 14.8 |
| 19 | Plains with eucalypt woodlands | 1 | 979 | 4.2 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Mod. high | 17 | Campsite | 3,456 | 14.8 | 0 | 7 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 288 | 288 |
| Mod. high | 4 | Euchre | 3,947 | 16.9 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 313 | 329 |
| Mod. high | 8 | Moriarty | 2,570 | 11.0 | 0 | 5 | 100 | 0 | 0 | 0 | 40 | 60 | 0 | 196 | 214 |
| Moderate | 19 | Pindar | 979 | 4.2 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 58 | 61 |
| Low | 11 | Bannar | 10,204 | 43.7 | 0 | 6 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 510 | 510 |
| Low | 1 | Mulline | 19 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Low | 16 | Tealtoo | 2,158 | 9.2 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 99 | 108 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Moderately high | 9,973 | 42.7 | 0 | 14 | 100 | 0 | 0 | 0 | 79 | 21 | 0 | 797 | 831 |
| Moderate | 979 | 4.2 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 58 | 61 |
| Low | 12,380 | 53.1 | 0 | 7 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 610 | 619 |
| **Total** | 23,332 | 100.0 | 0 | 23 | 100 | 0 | 0 | 0 | 83 | 17 | 0 | 1,465 | 1,511 |
| **Survey average for land systems on this station** | | | | | 99 | ^0 | 0 | ^0 | 67 | 23 | 10 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary (part only)

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 |
| Number of traverse points | 23 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 100 |
| % minor | 0 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 83 |
| % fair | 17 |
| % poor | 0 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 1,460 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 1,510 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# MOUROUBRA STATION

## PASTORAL LEASE 3114/427

**Area:** About 130,396 ha (legal); 129,707 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Mt Marshall

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 262 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 478 | 0.4 |
| 4 | Breakaways and stony plains | 3 | 13,473 | 10.4 |
| 6 | Granite plains and rises | 1 | 7,970 | 6.1 |
| 11 | Sandplains with dense mixed shrublands | 2 | 19,334 | 14.9 |
| 16 | Sandy acacia plains with wanderrie | 1 | 47,207 | 36.4 |
| 19 | Plains with eucalypt woodlands | 1 | 11,400 | 8.8 |
| 20 | Lake country | 1 | 29,845 | 23.0 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 26,960 | 21.0 | 0 | 36 | 92 | 8 | 0 | 0 | 72 | 28 | 0 | 3,528 | 3,851 |
| Mod. high | 19 | Doney | 11,400 | 8.8 | 0 | 17 | 100 | 0 | 0 | 0 | 53 | 41 | 6 | 875 | 950 |
| Mod. high | 4 | Euchre | 9,603 | 7.4 | 0 | 18 | 100 | 0 | 0 | 0 | 78 | 22 | 0 | 775 | 800 |
| Moderate | 6 | Bandy | 7,970 | 6.1 | 0 | 10 | 100 | 0 | 0 | 0 | 40 | 50 | 10 | 460 | 498 |
| Moderate | 4 | Olympic | 3,492 | 2.7 | 0 | 7 | 100 | 0 | 0 | 0 | 57 | 43 | 0 | 208 | 218 |
| Moderate | 4 | Waguin | 379 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 24 |
| Low | 11 | Bannar | 10,303 | 7.9 | 0 | 6 | 100 | 0 | 0 | 0 | 50 | 17 | 33 | 464 | 515 |
| Low | 1 | Norie | 478 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 24 |
| Low | 16 | Yowie | 47,207 | 36.0 | 0 | 64 | 100 | 0 | 0 | 0 | 55 | 34 | 11 | 2,148 | 2,360 |
| Negligible | 11 | Joseph | 9,031 | 7.0 | 0 | 6 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 181 | 181 |
| Nil | 20 | Lake bed | 2,885 | 2.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 26,960 | 20.8 | 0 | 36 | 92 | 8 | 0 | 0 | 72 | 28 | 0 | 3,528 | 3,851 |
| Moderately high | 21,003 | 16.2 | 0 | 35 | 100 | 0 | 0 | 0 | 66 | 31 | 3 | 1,650 | 1,750 |
| Moderate | 11,840 | 9.1 | 0 | 17 | 100 | 0 | 0 | 0 | 47 | 47 | 6 | 690 | 740 |
| Low | 57,988 | 44.7 | 0 | 70 | 100 | 0 | 0 | 0 | 54 | 33 | 13 | 2,634 | 2,899 |
| Negligible | 9,031 | 7.0 | 0 | 6 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 181 | 181 |
| Nil | 2,885 | 2.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 129,707 | 100.0 | 0 | 164 | 98 | 2 | 0 | 0 | 61 | 32 | 7 | 8,683 | 9,421 |
| **Survey average for land systems on this station** | | | | | 98 | 1 | ^0 | ^0 | 65 | 26 | 9 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 164 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 98 |
| % minor | 2 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 61 |
| % fair | 32 |
| % poor | 7 |
| ¦ Suggested carrying capacity (dse) over summer, following an effective winter season | 8,680 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 9,420 |

¦ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# MUNBINIA STATION

## PASTORAL LEASE 3114/957

**Area:** About 32,322 ha (legal); 32,283 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Mt Magnet

**Shire(s):** Mt Magnet

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 422 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 166 | 0.5 |
| 6 | Granite plains and rises | 1 | 3,291 | 10.2 |
| 8 | Chenopod plains and low rises | 1 | 939 | 2.9 |
| 13 | Mulga hardpan plains | 1 | 21,326 | 66.1 |
| 17 | Chenopod alluvial plains | 1 | 3,612 | 11.2 |
| 18 | Calcreted old drainage systems | 1 | 2,949 | 9.1 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 17 | Ero | 3,612 | 11.2 | 0 | 18 | 22 | 28 | 44 | 6 | 0 | 44 | 56 | 285 | 516 |
| High | 18 | Mileura | 2,949 | 9.1 | 0 | 17 | 76 | 18 | 6 | 0 | 29 | 47 | 24 | 305 | 421 |
| Mod. high | 8 | Gransal | 939 | 2.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 78 |
| Moderate | 6 | Challenge | 3,291 | 10.2 | 0 | 6 | 100 | 0 | 0 | 0 | 33 | 50 | 17 | 187 | 206 |
| Moderate | 13 | Woodline | 21,326 | 66.1 | 0 | 29 | 93 | 7 | 0 | 0 | 24 | 55 | 21 | 1,195 | 1,333 |
| Low | 1 | Norie | 166 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 6,561 | 20.3 | 0 | 35 | 48 | 23 | 26 | 3 | 14 | 46 | 40 | 590 | 937 |
| Moderately high | 939 | 2.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 78 |
| Moderate | 24,617 | 76.3 | 0 | 35 | 94 | 6 | 0 | 0 | 26 | 54 | 20 | 1,383 | 1,539 |
| Low | 166 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 |
| **Total** | 32,283 | 100.0 | 0 | 70 | 72 | 14 | 13 | 1 | 20 | 50 | 30 | 2,046 | 2,562 |
| **Survey average for land systems on this station** | | | | | 92 | 6 | 2 | ^0 | 30 | 40 | 30 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 70 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 72 |
| % minor | 14 |
| % moderate | 13 |
| % severe | 1 |
| Perennial vegetation | |
| % good | 20 |
| % fair | 50 |
| % poor | 30 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 2,050 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 2,560 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# MURALGARRA STATION

## PASTORAL LEASE 398/781

**Area:** About 126,447 ha (legal); 126,884 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 203 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 3 | 3,439 | 2.7 |
| 2 | Hills with mixed shrublands | 1 | 1,007 | 0.8 |
| 4 | Breakaways and stony plains | 2 | 17,158 | 13.5 |
| 5 | Breakaways and chenopod plains | 1 | 2,846 | 2.2 |
| 6 | Granite plains and rises | 1 | 24,707 | 19.5 |
| 7 | Undulating acacia country | 1 | 1,281 | 1.0 |
| 12 | Acacia sandplains | 1 | 18,400 | 14.5 |
| 13 | Mulga hardpan plains | 4 | 44,276 | 34.9 |
| 16 | Sandy acacia plains with wanderrie | 1 | 2,007 | 1.6 |
| 17 | Chenopod alluvial plains | 1 | 1,862 | 1.5 |
| 18 | Calcreted old drainage systems | 1 | 588 | 0.5 |
| 20 | Lake country | 1 | 9,314 | 7.3 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 8,750 | 6.9 | 0 | 8 | 100 | 0 | 0 | 0 | 37 | 50 | 13 | 971 | 1,250 |
| High | 17 | Ero | 1,862 | 1.5 | 0 | 5 | 40 | 20 | 40 | 0 | 0 | 40 | 60 | 144 | 266 |
| High | 5 | Gumbreak | 2,846 | 2.2 | 0 | 2 | 50 | 50 | 0 | 0 | 50 | 50 | 0 | 298 | 407 |
| High | 18 | Mileura | 588 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 84 |
| Mod. high | 4 | Sherwood | 11,547 | 9.1 | 0 | 21 | 85 | 5 | 5 | 5 | 19 | 57 | 24 | 807 | 962 |
| Mod. high | 13 | Tindalarra | 21,664 | 17.1 | 0 | 27 | 89 | 4 | 7 | 0 | 7 | 67 | 26 | 1,476 | 1,805 |
| Mod. high | 1 | Wiluna | 2,061 | 1.6 | 0 | 4 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 166 | 172 |
| Moderate | 6 | Challenge | 24,707 | 19.5 | 0 | 34 | 94 | 6 | 0 | 0 | 12 | 64 | 24 | 1,360 | 1,544 |
| Moderate | 13 | Jundee | 5,275 | 4.2 | 0 | 5 | 100 | 0 | 0 | 0 | 20 | 60 | 20 | 295 | 330 |
| Moderate | 13 | Rainbow | 740 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 46 |
| Moderate | 7 | Violet | 1,281 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 80 |
| Moderate | 4 | Waguin | 5,610 | 4.4 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 33 | 34 | 331 | 351 |
| Moderate | 13 | Woodline | 16,597 | 13.1 | 0 | 8 | 100 | 0 | 0 | 0 | 13 | 74 | 13 | 924 | 1,037 |
| Low | 1 | Gabanintha | 656 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 33 |
| Low | 12 | Kalli | 18,400 | 14.5 | 0 | 22 | 100 | 0 | 0 | 0 | 91 | 9 | 0 | 903 | 920 |
| Low | 16 | Yowie | 2,007 | 1.6 | 0 | 7 | 100 | 0 | 0 | 0 | 29 | 57 | 14 | 86 | 100 |
| Very low | 2 | Tallering | 1,007 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 34 |
| Very low | 1 | Watson | 722 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 24 |
| Nil | 20 | Lake bed | 564 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 14,046 | 11.1 | 0 | 15 | 74 | 13 | 13 | 0 | 27 | 53 | 20 | 1,474 | 2,007 |
| Moderately high | 35,272 | 27.8 | 0 | 52 | 88 | 4 | 6 | 2 | 17 | 60 | 23 | 2,449 | 2,939 |
| Moderate | 54,211 | 42.7 | 0 | 50 | 96 | 4 | 0 | 0 | 14 | 64 | 22 | 3,022 | 3,388 |
| Low | 21,062 | 16.6 | 0 | 29 | 100 | 0 | 0 | 0 | 76 | 21 | 3 | 1,018 | 1,053 |
| Very low | 1,729 | 1.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 58 |
| Nil | 564 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 126,884 | 100.0 | 0 | 146 | 92 | 4 | 3 | 1 | 29 | 53 | 18 | 8,016 | 9,445 |
| **Survey average for land systems on this station** | | | | | 94 | 4 | 1 | ^0 | 41 | 36 | 23 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 146 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 92 |
| % minor | 4 |
| % moderate | 3 |
| % severe | 1 |
| Perennial vegetation | |
| % good | 29 |
| % fair | 53 |
| % poor | 18 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 8,020 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 9,440 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# MURRUM STATION

## PASTORAL LEASE 3114/528

**Area:** About 101,123 ha (legal); 101,256 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Mt Magnet

**Shire(s):** Mt Magnet; Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 158 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 2,142 | 2.1 |
| 4 | Breakaways and stony plains | 2 | 2,257 | 2.2 |
| 6 | Granite plains and rises | 1 | 15,695 | 15.5 |
| 7 | Undulating acacia country | 1 | 2,662 | 2.6 |
| 8 | Chenopod plains and low rises | 1 | 1,657 | 1.6 |
| 12 | Acacia sandplains | 1 | 7,368 | 7.3 |
| 13 | Mulga hardpan plains | 4 | 52,418 | 51.8 |
| 14 | Mulga plains with some wanderrie | 1 | 3,366 | 3.3 |
| 15 | Chenopod washplains | 1 | 380 | 0.4 |
| 17 | Chenopod alluvial plains | 2 | 2,874 | 2.8 |
| 18 | Calcreted old drainage systems | 2 | 7,426 | 7.3 |
| 20 | Lake country | 1 | 3,011 | 3.0 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 3,011 | 3.0 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 301 | 430 |
| High | 17 | Ero | 2,133 | 2.1 | 0 | 5 | 60 | 40 | 0 | 0 | 20 | 40 | 40 | 200 | 305 |
| High | 18 | Mileura | 6,625 | 6.5 | 0 | 15 | 93 | 0 | 7 | 0 | 93 | 0 | 7 | 909 | 946 |
| High | 17 | Roderick | 741 | 0.7 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 106 | 106 |
| Mod. high | 18 | Cunyu | 801 | 0.8 | 0 | 2 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 45 | 67 |
| Mod. high | 8 | Gransal | 1,657 | 1.6 | 0 | 3 | 67 | 33 | 0 | 0 | 33 | 67 | 0 | 125 | 138 |
| Mod. high | 4 | Sherwood | 522 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 44 |
| Mod. high | 15 | Tango | 380 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 32 |
| Mod. high | 13 | Tindalarra | 3,852 | 3.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 260 | 321 |
| Moderate | 6 | Challenge | 15,695 | 15.5 | 0 | 30 | 97 | 3 | 0 | 0 | 40 | 47 | 13 | 904 | 981 |
| Moderate | 13 | Hamilton | 1,259 | 1.2 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 75 | 25 | 68 | 79 |
| Moderate | 13 | Jundee | 752 | 0.7 | 0 | 6 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 42 | 47 |
| Moderate | 7 | Violet | 2,662 | 2.6 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 148 | 166 |
| Moderate | 4 | Waguin | 1,735 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 102 | 108 |
| Moderate | 13 | Woodline | 46,555 | 46.0 | 39 | 66 | 98 | 2 | 0 | 0 | 30 | 55 | 15 | 2,643 | 2,910 |
| Moderate | 14 | Yanganoo | 3,366 | 3.3 | 0 | 7 | 100 | 0 | 0 | 0 | 86 | 14 | 0 | 207 | 210 |
| Low | 12 | Kalli | 7,368 | 7.3 | 0 | 9 | 100 | 0 | 0 | 0 | 78 | 11 | 11 | 352 | 368 |
| Low | 1 | Norie | 2,142 | 2.1 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 96 | 107 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 12,510 | 12.4 | 0 | 26 | 88 | 8 | 4 | 0 | 69 | 19 | 12 | 1,516 | 1,787 |
| Moderately high | 7,212 | 7.1 | 0 | 5 | 60 | 40 | 0 | 0 | 20 | 40 | 40 | 493 | 601 |
| Moderate | 72,024 | 71.1 | 39 | 117 | 98 | 2 | 0 | 0 | 32 | 55 | 13 | 4,114 | 4,502 |
| Low | 9,510 | 9.4 | 0 | 11 | 100 | 0 | 0 | 0 | 73 | 18 | 9 | 449 | 476 |
| **Total** | 101,256 | 100.0 | 39 | 159 | 95 | 4 | 1 | 0 | 41 | 46 | 13 | 6,572 | 7,366 |
| **Survey average for land systems on this station** | | | | | 93 | 5 | 2 | ^0 | 37 | 35 | 28 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 39 (< 0.1% of station) |
| Number of traverse points | 159 (includes 41 points from the Murchison rangeland survey) |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 95 |
| % minor | 4 |
| % moderate | 1 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 41 |
| % fair | 46 |
| % poor | 13 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 6,570 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 7,370 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# NALBARRA STATION

## PASTORAL LEASE 3114/1170

**Area:** About 141,716 ha (legal); 141,528 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Mt Magnet; Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 149 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 480 | 0.3 |
| 4 | Breakaways and stony plains | 2 | 13,764 | 9.7 |
| 6 | Granite plains and rises | 2 | 20,143 | 14.2 |
| 7 | Undulating acacia country | 1 | ^0 | ^0.0 |
| 8 | Chenopod plains and low rises | 2 | 5,358 | 3.8 |
| 12 | Acacia sandplains | 1 | 18,100 | 12.8 |
| 13 | Mulga hardpan plains | 2 | 65,899 | 46.6 |
| 14 | Mulga plains with some wanderrie | 1 | 1,372 | 1.0 |
| 15 | Chenopod washplains | 1 | 7,525 | 5.3 |
| 16 | Sandy acacia plains with wanderrie | 1 | 5,911 | 4.2 |
| 17 | Chenopod alluvial plains | 1 | 396 | 0.3 |
| 18 | Calcreted old drainage systems | 1 | 2,579 | 1.8 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 17 | Ero | 396 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 57 |
| High | 18 | Mileura | 2,579 | 1.8 | 0 | 9 | 89 | 11 | 0 | 0 | 22 | 22 | 56 | 228 | 368 |
| Mod. high | 8 | Gransal | 5,006 | 3.5 | 0 | 8 | 88 | 0 | 12 | 0 | 12 | 25 | 63 | 345 | 417 |
| Mod. high | 15 | Marlow | 7,525 | 5.3 | 0 | 20 | 100 | 0 | 0 | 0 | 5 | 50 | 45 | 488 | 627 |
| Mod. high | 8 | Nallex | 352 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 29 |
| Mod. high | 4 | Sherwood | 11,219 | 7.9 | 0 | 6 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 811 | 935 |
| Mod. high | 13 | Tindalarra | 5,885 | 4.2 | 0 | 8 | 100 | 0 | 0 | 0 | 0 | 25 | 75 | 350 | 490 |
| Moderate | 6 | Bandy | 422 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 26 |
| Moderate | 6 | Challenge | 19,721 | 13.9 | 0 | 31 | 94 | 0 | 6 | 0 | 0 | 35 | 65 | 1,024 | 1,233 |
| Moderate | 7 | Violet | ^0 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Moderate | 4 | Waguin | 2,545 | 1.8 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 134 | 159 |
| Moderate | 13 | Woodline | 60,014 | 42.4 | 0 | 43 | 95 | 5 | 0 | 0 | 16 | 40 | 44 | 3,340 | 3,751 |
| Moderate | 14 | Yanganoo | 1,372 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 | 86 |
| Low | 1 | Gabanintha | 251 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 13 |
| Low | 12 | Kalli | 18,100 | 12.8 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 849 | 905 |
| Low | 1 | Norie | 230 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 12 |
| Low | 16 | Yowie | 5,911 | 4.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 266 | 296 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 2,975 | 2.1 | 0 | 9 | 89 | 11 | 0 | 0 | 22 | 22 | 56 | 268 | 425 |
| Moderately high | 29,987 | 21.2 | 0 | 42 | 98 | 0 | 2 | 0 | 19 | 33 | 48 | 2,017 | 2,499 |
| Moderate | 84,074 | 59.4 | 0 | 78 | 94 | 3 | 3 | 0 | 9 | 38 | 53 | 4,600 | 5,255 |
| Low | 24,492 | 17.3 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 1,137 | 1,225 |
| **Total** | 141,528 | 100.0 | 0 | 133 | 96 | 2 | 2 | 0 | 16 | 34 | 50 | 8,022 | 9,404 |
| **Survey average for land systems on this station** | | | | | 94 | 4 | 2 | ^0 | 37 | 36 | 27 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 133 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 96 |
| % minor | 2 |
| % moderate | 2 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 16 |
| % fair | 34 |
| % poor | 50 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 8,020 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 9,400 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# NARNDEE STATION

## PASTORAL LEASE 3114/1284

**Area:** About 223,191 ha (legal); 223,508 ha (computed)
**Area surveyed:** Whole station
**Land Conservation District:** Mt Magnet
**Shire(s):** Sandstone; Menzies; Mt Magnet

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 2,139†ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 3 | 2,533 | 1.1 |
| 4 | Breakaways and stony plains | 4 | 19,401 | 8.7 |
| 5 | Breakawaysand chenopod plains | 2 | 15,900 | 7.1 |
| 6 | Granite plains and rises | 2 | 5,715 | 2.6 |
| 7 | Undulating acacia country | 2 | 4,731 | 2.1 |
| 8 | Chenopod plains and low rises | 2 | 15,485 | 6.9 |
| 10 | Spinifex sandplains | 1 | 30,960 | 13.9 |
| 11 | Sandplains with dense mixed shrublands | 1 | 7,591 | 3.4 |
| 12 | Acacia sandplains | 1 | 7,447 | 3.3 |
| 13 | Mulga hardpan plains | 5 | 22,093 | 9.9 |
| 14 | Mulga plains with some wanderrie | 1 | 4,869 | 2.2 |
| 15 | Chenopod washplains | 1 | 209 | 0.1 |
| 16 | Sandy acacia plains with wanderrie | 1 | 69,448 | 31.1 |
| 17 | Chenopod alluvial plains | 2 | 2,426 | 1.1 |
| 18 | Calcreted old drainage systems | 1 | 1,004 | 0.4 |
| 20 | Lake country | 1 | 13,696 | 6.1 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Very high | 17 | Merbla | 1,201 | 0.5 | 0 | 6 | 83 | 0 | 17 | 0 | 67 | 0 | 33 | 189 | 240 |
| High | 20 | Carnegie | 13,514 | 6.0 | 0 | 14 | 86 | 14 | 0 | 0 | 21 | 58 | 21 | 1,367 | 1,931 |
| High | 5 | Gumbreak | 699 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 100 |
| Mod. high | 4 | Euchre | ^0 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mod. high | 8 | Gransal | 6,440 | 2.9 | 147 | 17 | 65 | 35 | 0 | 0 | 0 | 41 | 59 | 392 | 537 |
| Mod. high | 5 | Hootanui | 15,201 | 6.8 | 0 | 39 | 74 | 18 | 8 | 0 | 8 | 36 | 56 | 965 | 1,267 |
| Mod. high | 8 | Nallex | 9,044 | 4.0 | 0 | 16 | 81 | 19 | 0 | 0 | 31 | 31 | 38 | 625 | 754 |
| Mod. high | 7 | Nubev | 974 | 0.4 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 33 | 67 | 59 | 81 |
| Mod. high | 4 | Sherwood | 10,594 | 4.7 | 0 | 10 | 100 | 0 | 0 | 0 | 30 | 30 | 40 | 727 | 883 |
| Mod. high | 17 | Skipper | 1,225 | 0.5 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 102 | 102 |
| Mod. high | 15 | Tango | 209 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 17 |
| Mod. high | 13 | Tindalarra | 3,813 | 1.7 | 0 | 8 | 74 | 13 | 13 | 0 | 0 | 25 | 75 | 227 | 318 |
| Moderate | 6 | Bandy | 893 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54 | 56 |
| Moderate | 6 | Challenge | 4,822 | 2.2 | 0 | 6 | 100 | 0 | 0 | 0 | 17 | 50 | 33 | 265 | 301 |
| Moderate | 13 | Hamilton | 526 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 33 |
| Moderate | 18 | Melaleuca | 1,004 | 0.4 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 59 | 63 |
| Moderate | 4 | Olympic | 1,425 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 85 | 89 |
| Moderate | 13 | Rainbow | 6,152 | 2.8 | 0 | 5 | 100 | 0 | 0 | 0 | 0 | 20 | 80 | 341 | 385 |
| Moderate | 13 | Ranch | 2,836 | 1.3 | 0 | 6 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 158 | 177 |
| Moderate | 7 | Violet | 3,757 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 211 | 235 |
| Moderate | 4 | Waguin | 7,382 | 3.3 | 0 | 10 | 100 | 0 | 0 | 0 | 60 | 30 | 10 | 437 | 461 |
| Moderate | 13 | Woodline | 8,766 | 3.9 | 0 | 15 | 100 | 0 | 0 | 0 | 7 | 67 | 26 | 479 | 548 |
| Moderate | 14 | Yanganoo | 4,869 | 2.2 | 0 | 10 | 100 | 0 | 0 | 0 | 0 | 10 | 90 | 246 | 304 |
| Low | 1 | Bevon | 1,276 | 0.6 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 51 | 64 |
| Low | 11 | Bannar | 7,591 | 3.4 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 370 | 380 |
| Low | 12 | Kalli | 7,447 | 3.3 | 0 | 4 | 100 | 0 | 0 | 0 | 25 | 75 | 0 | 349 | 372 |
| Low | 1 | Naluthanna | 455 | 0.2 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 18 | 23 |
| Low | 1 | Norie | 802 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 40 |
| Low | 16 | Yowie | 69,448 | 31.1 | 0 | 98 | 100 | 0 | 0 | 0 | 23 | 54 | 23 | 2,938 | 3,472 |
| Very low | 10 | Marmion | 30,960 | 13.9 | 0 | 8 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 995 | 1,032 |
| Nil | 20 | Lake bed | 182 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Very high | 1,201 | 0.5 | 0 | 6 | 83 | 0 | 17 | 0 | 67 | 0 | 33 | 189 | 240 |
| High | 14,213 | 6.4 | 0 | 14 | 86 | 14 | 0 | 0 | 21 | 58 | 21 | 1,440 | 2,030 |
| Moderately high | 47,501 | 21.2 | 147 | 95 | 78 | 18 | 4 | 0 | 14 | 34 | 52 | 3,111 | 3,958 |
| Moderate | 42,432 | 19 | 0 | 54 | 100 | 0 | 0 | 0 | 17 | 46 | 37 | 2,364 | 2,652 |
| Low | 87,019 | 38.9 | 0 | 106 | 100 | 0 | 0 | 0 | 23 | 52 | 25 | 3,764 | 4,351 |
| Very low | 30,960 | 13.9 | 0 | 8 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 995 | 1,032 |
| Nil | 182 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 223,508 | 100.0 | 147 | 283 | 91 | 7 | 2 | 0 | 21 | 43 | 36 | 11,863 | 14,263 |
| **Survey average for land systems on this station** | | | | | 95 | 3 | 1 | ^0 | 43 | 34 | 23 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 147 (< 0.1% of station) |
| Number of traverse points | 283 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 91 |
| % minor | 7 |
| % moderate | 2 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 21 |
| % fair | 43 |
| % poor | 36 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 11,860 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 14,260 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# NINGHAN STATION

## PASTORAL LEASE 3114/602

**Area:** About 206,787 ha (legal); 206,574 ha (computed)
**Area surveyed:** Whole station
**Land Conservation District:** Yalgoo
**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 431 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 3 | 25,199 | 12.2 |
| 2 | Hills with mixed shrublands | 2 | 15,070 | 7.3 |
| 4 | Breakaways and stony plains | 3 | 33,310 | 16.1 |
| 6 | Granite plains and rises | 2 | 4,555 | 2.2 |
| 7 | Undulating acacia country | 2 | 5,170 | 2.5 |
| 8 | Chenopod plains and low rises | 2 | 5,241 | 2.5 |
| 9 | Stony non-chenopod plains | 1 | 301 | 0.1 |
| 11 | Sandplains with dense mixed shrublands | 1 | 2,539 | 1.2 |
| 12 | Acacia sandplains | 1 | 6,553 | 3.2 |
| 13 | Mulga hardpan plains | 5 | 17,585 | 8.5 |
| 16 | Sandy acacia plains with wanderrie | 2 | 49,179 | 23.8 |
| 17 | Chenopod alluvial plains | 2 | 1,502 | 0.7 |
| 18 | Calcreted old drainage systems | 1 | 2,653 | 1.3 |
| 19 | Plains with eucalypt woodlands | 2 | 12,977 | 6.3 |
| 20 | Lake country | 1 | 24,737 | 12.0 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 24,085 | 11.7 | 0 | 27 | 100 | 0 | 0 | 0 | 23 | 70 | 7 | 2,583 | 3,441 |
| High | 17 | Ero | 40 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 |
| High | 18 | Mileura | 2,653 | 1.3 | 0 | 7 | 86 | 14 | 0 | 0 | 0 | 14 | 86 | 180 | 379 |
| Mod. high | 17 | Campsite | 1,463 | 0.7 | 0 | 5 | 100 | 0 | 0 | 0 | 0 | 80 | 20 | 100 | 122 |
| Mod. high | 19 | Doney | 12,344 | 6.0 | 0 | 15 | 93 | 0 | 7 | 0 | 40 | 40 | 20 | 901 | 1,029 |
| Mod. high | 4 | Euchre | 1,522 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 121 | 127 |
| Mod. high | 8 | Gransal | 41 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Mod. high | 8 | Moriarty | 5,200 | 2.5 | 0 | 7 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 433 | 433 |
| Mod. high | 7 | Nubev | 510 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 43 |
| Mod. high | 13 | Tindalarra | 11,962 | 5.8 | 0 | 24 | 96 | 4 | 0 | 0 | 12 | 63 | 25 | 824 | 997 |
| Moderate | 6 | Bandy | 1,753 | 0.8 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 110 | 110 |
| Moderate | 6 | Challenge | 2,802 | 1.4 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 157 | 175 |
| Moderate | 9 | Felix | 301 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 19 |
| Moderate | 16 | Illaara | 3,868 | 1.9 | 0 | 6 | 100 | 0 | 0 | 0 | 33 | 67 | 0 | 224 | 242 |
| Moderate | 13 | Jundee | 1,155 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 72 |
| Moderate | 4 | Olympic | 30,675 | 14.8 | 0 | 26 | 100 | 0 | 0 | 0 | 73 | 27 | 0 | 1,860 | 1,917 |
| Moderate | 19 | Pindar | 633 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 40 |
| Moderate | 13 | Rainbow | 696 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 44 |
| Moderate | 13 | Ranch | 3,750 | 1.8 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 75 | 25 | 204 | 234 |
| Moderate | 4 | Waguin | 1,114 | 0.5 | 0 | 4 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 68 | 70 |
| Moderate | 13 | Yalluwin | 21 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Low | 1 | Gabanintha | 16,553 | 8.0 | 0 | 15 | 100 | 0 | 0 | 0 | 40 | 40 | 20 | 728 | 828 |
| Low | 12 | Kalli | 6,553 | 3.2 | 0 | 4 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 307 | 328 |
| Low | 7 | Nerramyne | 4,660 | 2.3 | 0 | 5 | 100 | 0 | 0 | 0 | 80 | 20 | 0 | 224 | 233 |
| Low | 1 | Norie | 2,783 | 1.3 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 125 | 139 |
| Low | 2 | Singleton | 13,170 | 6.4 | 0 | 10 | 100 | 0 | 0 | 0 | 80 | 0 | 20 | 607 | 659 |
| Low | 16 | Yowie | 45,311 | 21.9 | 0 | 54 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 2,116 | 2,266 |
| Very low | 2 | Tallering | 1,899 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 63 |
| Very low | 1 | Watson | 5,863 | 2.8 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 174 | 195 |
| Negligible | 11 | Joseph | 2,539 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 51 |
| Nil | 20 | Lake bed | 652 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 26,778 | 13.0 | 0 | 34 | 97 | 3 | 0 | 0 | 18 | 59 | 23 | 2,766 | 3,825 |
| Moderately high | 33,042 | 16.0 | 0 | 51 | 96 | 2 | 2 | 0 | 31 | 49 | 20 | 2,417 | 2,754 |
| Moderate | 46,770 | 22.6 | 0 | 44 | 100 | 0 | 0 | 0 | 59 | 39 | 2 | 2,783 | 2,923 |
| Low | 89,030 | 43.1 | 0 | 90 | 100 | 0 | 0 | 0 | 64 | 30 | 6 | 4,108 | 4,452 |
| Very low | 7,763 | 3.8 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 234 | 259 |
| Negligible | 2,539 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 51 |
| Nil | 652 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 206,574 | 100.0 | 0 | 221 | 99 | 1 | ^0 | 0 | 48 | 41 | 11 | 12,359 | 14,264 |
| **Survey average for land systems on this station** | | | | | 95 | 4 | 1 | ^0 | 47 | 34 | 19 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 221 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 99 |
| % minor | 1 |
| % moderate | ^0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 48 |
| % fair | 41 |
| % poor | 11 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 12,360 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 14,260 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# NOONGAL STATION

## PASTORAL LEASE 3114/1220

**Area:** About 71,069 ha (legal); 71,254 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 290 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 3 | 11,847 | 16.6 |
| 4 | Breakaways and stony plains | 3 | 3,840 | 5.4 |
| 6 | Granite plains and rises | 1 | 8,696 | 12.2 |
| 7 | Undulating acacia country | 1 | 2,395 | 3.4 |
| 12 | Acacia sandplains | 1 | 14,492 | 20.3 |
| 13 | Mulga hardpan plains | 4 | 22,132 | 31.1 |
| 14 | Mulga plains with some wanderrie | 1 | 993 | 1.4 |
| 18 | Calcreted old drainage systems | 1 | 6,859 | 9.6 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 4 | Ero | 53 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 8 |
| Mod. high | 18 | Cunyu | 6,859 | 9.6 | 0 | 10 | 100 | 0 | 0 | 0 | 50 | 40 | 10 | 423 | 572 |
| Mod. high | 4 | Sherwood | 2,128 | 3.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 154 | 177 |
| Mod. high | 13 | Tindalarra | 13,061 | 18.3 | 0 | 39 | 84 | 13 | 3 | 0 | 8 | 54 | 38 | 867 | 1,088 |
| Moderate | 6 | Challenge | 8,696 | 12.2 | 0 | 23 | 96 | 0 | 4 | 0 | 44 | 39 | 17 | 501 | 544 |
| Moderate | 13 | Hamilton | 1,175 | 1.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 73 |
| Moderate | 13 | Jundee | 4,025 | 5.6 | 0 | 5 | 80 | 20 | 0 | 0 | 0 | 40 | 60 | 210 | 252 |
| Moderate | 7 | Violet | 2,395 | 3.4 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 135 | 150 |
| Moderate | 4 | Waguin | 1,944 | 2.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 115 | 122 |
| Moderate | 13 | Woodline | 3,871 | 5.4 | 0 | 11 | 100 | 0 | 0 | 0 | 0 | 82 | 18 | 211 | 242 |
| Moderate | 14 | Yanganoo | 993 | 1.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 62 |
| Low | 1 | Gabanintha | 2,310 | 3.2 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 92 | 116 |
| Low | 12 | Kalli | 14,492 | 20.3 | 0 | 6 | 100 | 0 | 0 | 0 | 50 | 0 | 50 | 680 | 725 |
| Low | 1 | Norie | 8,238 | 11.6 | 0 | 8 | 100 | 0 | 0 | 0 | 87 | 13 | 0 | 401 | 412 |
| Very low | 1 | Farmer | 1,014 | 1.4 | 0 | 5 | 80 | 20 | 0 | 0 | 0 | 80 | 20 | 32 | 34 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 53 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 8 |
| Moderately high | 22,048 | 31.0 | 0 | 49 | 88 | 10 | 2 | 0 | 16 | 51 | 33 | 1,444 | 1,837 |
| Moderate | 23,099 | 32.4 | 0 | 41 | 96 | 2 | 2 | 0 | 24 | 52 | 24 | 1,293 | 1,444 |
| Low | 25,040 | 35.1 | 0 | 17 | 100 | 0 | 0 | 0 | 59 | 23 | 18 | 1,173 | 1,252 |
| Very low | 1,014 | 1.4 | 0 | 5 | 80 | 20 | 0 | 0 | 0 | 80 | 20 | 32 | 34 |
| **Total** | 71,254 | 100.0 | 0 | 112 | 92 | 6 | 2 | 0 | 25 | 48 | 27 | 3,947 | 4,575 |
| **Survey average for land systems on this station** | | | | | 95 | 3 | 1 | ^0 | 34 | 37 | 29 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# *Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.*

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** *Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.*

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 112 (includes 35 points from the Murchison rangeland survey) |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 92 |
| % minor | 6 |
| % moderate | 2 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 25 |
| % fair | 48 |
| % poor | 27 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 3,950 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 4,580 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# OUDABUNNA STATION

## PASTORAL LEASE 3114/613

**Area:** About 92,382 ha (legal); 92,207 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 510 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 3,416 | 3.7 |
| 4 | Breakaways and stony plains | 4 | 21,006 | 22.8 |
| 6 | Granite plains and rises | 1 | 7,477 | 8.1 |
| 7 | Undulating acacia country | 1 | 557 | 0.6 |
| 10 | Spinifex sandplains | 1 | 87 | 0.1 |
| 11 | Sandplains with dense mixed shrublands | 1 | 2,136 | 2.3 |
| 12 | Acacia sandplains | 1 | 5,118 | 5.6 |
| 13 | Mulga hardpan plains | 3 | 17,034 | 18.5 |
| 16 | Sandy acacia plains with wanderrie | 1 | 35,376 | 38.4 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Mod. high | 4 | Euchre | 1,020 | 1.1 | 0 | 3 | 67 | 0 | 0 | 33 | 67 | 0 | 33 | 76 | 85 |
| Mod. high | 4 | Sherwood | 1,579 | 1.7 | 0 | 5 | 80 | 20 | 0 | 0 | 80 | 20 | 0 | 128 | 132 |
| Mod. high | 13 | Tindalarra | 11,483 | 12.5 | 156 | 27 | 96 | 4 | 0 | 0 | 37 | 52 | 11 | 842 | 957 |
| Moderate | 6 | Challenge | 7,477 | 8.1 | 0 | 5 | 100 | 0 | 0 | 0 | 60 | 40 | 0 | 420 | 467 |
| Moderate | 4 | Olympic | 16,861 | 18.3 | 0 | 18 | 94 | 6 | 0 | 0 | 50 | 50 | 0 | 995 | 1,054 |
| Moderate | 7 | Violet | 557 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 35 |
| Moderate | 4 | Waguin | 1,546 | 1.7 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 91 | 97 |
| Moderate | 13 | Woodline | 5,483 | 5.9 | 0 | 5 | 100 | 0 | 0 | 0 | 80 | 20 | 0 | 335 | 343 |
| Moderate | 13 | Yalluwin | 68 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Low | 11 | Bannar | 2,136 | 2.3 | 0 | 5 | 100 | 0 | 0 | 0 | 80 | 20 | 0 | 103 | 107 |
| Low | 12 | Kalli | 5,118 | 5.6 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 240 | 256 |
| Low | 1 | Norie | 3,416 | 3.7 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 171 | 171 |
| Low | 16 | Yowie | 35,376 | 38.4 | 0 | 37 | 100 | 0 | 0 | 0 | 49 | 40 | 11 | 1,588 | 1,769 |
| Very low | 10 | Marmion | 87 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Moderately high | 14,082 | 15.3 | 156 | 35 | 91 | 6 | 0 | 3 | 46 | 43 | 11 | 1,046 | 1,174 |
| Moderate | 31,992 | 34.7 | 0 | 30 | 97 | 3 | 0 | 0 | 57 | 43 | 0 | 1,877 | 2,000 |
| Low | 46,046 | 49.9 | 0 | 47 | 100 | 0 | 0 | 0 | 57 | 34 | 9 | 2,102 | 2,302 |
| Very low | 87 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| **Total** | 92,207 | 100.0 | 156 | 112 | 96 | 3 | 0 | 1 | 54 | 39 | 7 | 5,028 | 5,479 |
| **Survey average for land systems on this station** | | | | | 97 | 2 | 1 | ^0 | 46 | 33 | 21 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

**Station summary**

| | |
|---|---|
| Severely degraded and eroded (ha) | 156 (0.2% of station) |
| Number of traverse points | 112 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 96 |
| % minor | 3 |
| % moderate | 0 |
| % severe | 1 |
| Perennial vegetation | |
| % good | 54 |
| % fair | 39 |
| % poor | 7 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 5,030 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 5,480 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# PERANGERY STATION

## PASTORAL LEASE 3114/806

**Area:** About 11,886 ha (legal); 11,879 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Perenjori

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 72 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 7 | Undulating acacia country | 1 | 419 | 3.5 |
| 11 | Sandplains with dense mixed shrublands | 1 | 561 | 4.7 |
| 16 | Sandy acacia plains with wanderrie | 1 | 643 | 5.4 |
| 19 | Plains with eucalypt woodlands | 2 | 555 | 4.7 |
| 20 | Lake country | 1 | 9,701 | 81.7 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 7,917 | 66.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 964 | 1,131 |
| Mod. high | 19 | Doney | 7 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Moderate | 19 | Pindar | 548 | 4.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 34 |
| Low | 7 | Nerramyne | 419 | 3.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 21 |
| Low | 16 | Yowie | 643 | 5.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 32 |
| Negligible | 11 | Joseph | 561 | 4.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 11 |
| Nil | 20 | Lake bed | 1,784 | 15.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | Scc (dse) | Pcc (dse) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | (from table 2) | |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 7,917 | 66.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 964 | 1,131 |
| Moderately high | 7 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Moderate | 548 | 4.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 34 |
| Low | 1,062 | 8.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 53 |
| Negligible | 561 | 4.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 11 |
| Nil | 1,784 | 15.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 11,879 | 100.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,056 | 1,230 |
| **Survey average for land systems on this station** | | | | | 98 | 1 | ^0 | ^0 | 58 | 31 | 11 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 0 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 0 |
| % minor | 0 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 0 |
| % fair | 0 |
| % poor | 0 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 1,060 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 1,230 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# PINDABUNNA STATION

## PASTORAL LEASE 3114/523

**Area:** About 238,037 ha (legal); 237,829 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 84 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 627 | 0.3 |
| 4 | Breakaways and stony plains | 3 | 32,254 | 13.6 |
| 6 | Granite plains and rises | 2 | 3,848 | 1.6 |
| 8 | Chenopod plains and low rises | 1 | 966 | 0.4 |
| 11 | Sandplains with dense mixed shrublands | 1 | 65,928 | 27.7 |
| 12 | Acacia sandplains | 1 | 2,331 | 1.0 |
| 13 | Mulga hardpan plains | 3 | 16,940 | 7.1 |
| 14 | Mulga plains with some wanderrie | 1 | 3,747 | 1.6 |
| 15 | Chenopod washplains | 1 | 6,170 | 2.6 |
| 16 | Sandy acacia plains with wanderrie | 1 | 84,078 | 35.4 |
| 17 | Chenopod alluvial plains | 1 | 6,913 | 2.9 |
| 18 | Calcreted old drainage systems | 1 | 126 | 0.1 |
| 19 | Plains with eucalypt woodlands | 1 | 1,953 | 0.8 |
| 20 | Lake country | 1 | 11,949 | 5.0 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 11,949 | 5.0 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 33 | 34 | 1,463 | 1,707 |
| High | 17 | Ero | 6,913 | 2.9 | 3,297 | 13 | 69 | 8 | 0 | 23 | 0 | 23 | 77 | 703 | 988 |
| High | 18 | Mileura | 126 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 18 |
| Mod. high | 19 | Doney | 1,953 | 0.8 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 146 | 163 |
| Mod. high | 4 | Euchre | 15,672 | 6.6 | 0 | 9 | 100 | 0 | 0 | 0 | 33 | 33 | 34 | 1,243 | 1,306 |
| Mod. high | 15 | Marlow | 6,170 | 2.6 | 0 | 15 | 60 | 26 | 7 | 7 | 0 | 13 | 87 | 356 | 514 |
| Mod. high | 8 | Nallex | 966 | 0.4 | 9 | 6 | 83 | 0 | 17 | 0 | 0 | 17 | 83 | 56 | 81 |
| Mod. high | 13 | Tindalarra | 156 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 13 |
| Moderate | 6 | Bandy | 1,212 | 0.5 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 67 | 76 |
| Moderate | 6 | Challenge | 2,636 | 1.1 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 165 | 165 |
| Moderate | 4 | Olympic | 11,427 | 4.8 | 0 | 7 | 100 | 0 | 0 | 0 | 14 | 86 | 0 | 681 | 714 |
| Moderate | 13 | Ranch | 8,600 | 3.6 | 0 | 10 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 468 | 538 |
| Moderate | 4 | Waguin | 5,155 | 2.2 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 304 | 322 |
| Moderate | 13 | Woodline | 8,185 | 3.4 | 0 | 13 | 84 | 8 | 0 | 8 | 15 | 62 | 23 | 453 | 512 |
| Moderate | 14 | Yanganoo | 3,747 | 1.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 207 | 234 |
| Low | 11 | Bannar | 65,928 | 27.7 | 0 | 14 | 93 | 7 | 0 | 0 | 50 | 14 | 36 | 3,217 | 3,296 |
| Low | 12 | Kalli | 2,331 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 109 | 117 |
| Low | 1 | Norie | 627 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 31 |
| Low | 16 | Yowie | 84,078 | 35.4 | 0 | 60 | 98 | 0 | 2 | 0 | 30 | 40 | 30 | 3,615 | 4,204 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 18,987 | 8.0 | 3,297 | 16 | 75 | 6 | 0 | 19 | 6 | 25 | 69 | 2,179 | 2,713 |
| Moderately high | 24,917 | 10.5 | 9 | 31 | 74 | 17 | 6 | 3 | 10 | 19 | 71 | 1,812 | 2,076 |
| Moderate | 40,961 | 17.2 | 0 | 35 | 94 | 3 | 0 | 3 | 20 | 57 | 23 | 2,345 | 2,560 |
| Low | 152,964 | 64.3 | 0 | 74 | 98 | 1 | 1 | 0 | 34 | 35 | 31 | 6,971 | 7,648 |
| **Total** | 237,829 | 100.0 | 3,306 | 156 | 90 | 5 | 2 | 3 | 23 | 36 | 41 | 13,307 | 14,997 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 44 | 33 | 23 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 3,306 (1.4% of station) |
| Number of traverse points | 156 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 90 |
| % minor | 5 |
| % moderate | 2 |
| % severe | 3 |
| Perennial vegetation | |
| % good | 23 |
| % fair | 36 |
| % poor | 41 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 13,310 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 15,000 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# PULLAGAROO STATION

## PASTORAL LEASE 3114/467

**Area:** About 76,616 ha (legal); 76,014 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Sandstone; Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 128 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 4,557 | 6.0 |
| 4 | Breakaways and stony plains | 3 | 16,042 | 21.1 |
| 6 | Granite plains and rises | 1 | 147 | 0.2 |
| 7 | Undulating acacia country | 1 | 3 | ^0.0 |
| 8 | Chenopod plains and low rises | 1 | 590 | 0.8 |
| 9 | Stony non-chenopod plains | 1 | 884 | 1.2 |
| 12 | Acacia sandplains | 1 | 5,671 | 7.5 |
| 13 | Mulga hardpan plains | 4 | 23,019 | 30.3 |
| 16 | Sandy acacia plains with wanderrie | 1 | 22,303 | 29.3 |
| 19 | Plains with eucalypt woodlands | 1 | 201 | 0.3 |
| 20 | Lake country | 1 | 2,598 | 3.4 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 2,565 | 3.4 | 0 | 16 | 94 | 6 | 0 | 0 | 87 | 13 | 0 | 352 | 366 |
| Mod. high | 19 | Doney | 201 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 17 |
| Mod. high | 8 | Gransal | 590 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 49 |
| Mod. high | 4 | Sherwood | 5,470 | 7.2 | 0 | 18 | 83 | 17 | 0 | 0 | 67 | 22 | 11 | 425 | 456 |
| Mod. high | 13 | Tindalarra | 3,541 | 4.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 239 | 295 |
| Moderate | 6 | Bandy | 147 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 |
| Moderate | 9 | Felix | 884 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 55 |
| Moderate | 4 | Olympic | 8,423 | 11.1 | 0 | 16 | 100 | 0 | 0 | 0 | 81 | 13 | 6 | 513 | 526 |
| Moderate | 13 | Ranch | 2,392 | 3.1 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 67 | 33 | 129 | 150 |
| Moderate | 7 | Violet | 3 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Moderate | 4 | Waguin | 2,150 | 2.8 | 0 | 5 | 100 | 0 | 0 | 0 | 80 | 20 | 0 | 131 | 134 |
| Moderate | 13 | Woodline | 15,421 | 20.3 | 0 | 31 | 100 | 0 | 0 | 0 | 84 | 16 | 0 | 947 | 964 |
| Moderate | 13 | Yalluwin | 1,664 | 2.2 | 0 | 5 | 100 | 0 | 0 | 0 | 80 | 20 | 0 | 102 | 104 |
| Low | 1 | Gabanintha | 1,244 | 1.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54 | 62 |
| Low | 12 | Kalli | 5,671 | 7.5 | 0 | 7 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 284 | 284 |
| Low | 1 | Norie | 3,314 | 4.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 153 | 166 |
| Low | 16 | Yowie | 22,303 | 29.3 | 0 | 26 | 100 | 0 | 0 | 0 | 73 | 27 | 0 | 1,055 | 1,115 |
| Nil | 20 | Lake bed | 33 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 2,565 | 3.4 | 0 | 16 | 94 | 6 | 0 | 0 | 87 | 13 | 0 | 352 | 366 |
| Moderately high | 9,802 | 12.9 | 0 | 18 | 83 | 17 | 0 | 0 | 67 | 22 | 11 | 720 | 817 |
| Moderate | 31,083 | 40.9 | 0 | 60 | 100 | 0 | 0 | 0 | 78 | 19 | 3 | 1,882 | 1,943 |
| Low | 32,531 | 42.8 | 0 | 33 | 100 | 0 | 0 | 0 | 79 | 21 | 0 | 1,545 | 1,627 |
| Nil | 33 | ^0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 76,014 | 100.0 | 0 | 127 | 97 | 3 | 0 | 0 | 78 | 19 | 3 | 4,499 | 4,753 |
| **Survey average for land systems on this station** | | | | | 95 | 3 | 1 | ^0 | 43 | 35 | 22 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 127 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 97 |
| % minor | 3 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 78 |
| % fair | 19 |
| % poor | 3 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 4,500 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 4,750 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# REMLAP STATION

## PASTORAL LEASE 3114/1254

**Area:** About 42,389 ha (legal); 42,299 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Koorda; Mt Marshall

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 148 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 1 | ^0.0 |
| 4 | Breakaways and stony plains | 1 | 1,136 | 2.7 |
| 6 | Granite plains and rises | 1 | 1,164 | 2.8 |
| 11 | Sandplains with dense mixed shrublands | 2 | 18,895 | 44.7 |
| 16 | Sandy acacia plains with wanderrie | 1 | 8,491 | 20.1 |
| 19 | Plains with eucalypt woodlands | 1 | 759 | 1.8 |
| 20 | Lake country | 1 | 11,854 | 28.0 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 11,845 | 28.0 | 0 | 19 | 84 | 11 | 5 | 0 | 37 | 47 | 16 | 1,301 | 1,692 |
| Mod. high | 19 | Doney | 759 | 1.8 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 48 | 63 |
| Mod. high | 4 | Euchre | 1,136 | 2.7 | 0 | 7 | 100 | 0 | 0 | 0 | 29 | 42 | 29 | 80 | 95 |
| Moderate | 6 | Bandy | 1,164 | 2.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 73 |
| Low | 11 | Bannar | 14,480 | 34.2 | 0 | 25 | 100 | 0 | 0 | 0 | 40 | 56 | 4 | 637 | 724 |
| Low | 1 | Norie | 1 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Low | 16 | Yowie | 8,491 | 20.1 | 0 | 7 | 100 | 0 | 0 | 0 | 57 | 43 | 0 | 388 | 425 |
| Negligible | 11 | Joseph | 4,415 | 10.4 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 88 | 88 |
| Nil | 20 | Lake bed | 9 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 11,845 | 28.0 | 0 | 19 | 84 | 11 | 5 | 0 | 37 | 47 | 16 | 1,301 | 1,692 |
| Moderately high | 1,894 | 4.5 | 0 | 11 | 100 | 0 | 0 | 0 | 18 | 46 | 36 | 128 | 158 |
| Moderate | 1,164 | 2.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 73 |
| Low | 22,972 | 54.3 | 0 | 32 | 100 | 0 | 0 | 0 | 44 | 53 | 3 | 1,025 | 1,149 |
| Negligible | 4,415 | 10.4 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 88 | 88 |
| Nil | 9 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 42,299 | 100.0 | 0 | 65 | 95 | 3 | 2 | 0 | 40 | 48 | 12 | 2,612 | 3,160 |
| **Survey average for land systems on this station** | | | | | 98 | 1 | ^0 | ^0 | 65 | 26 | 9 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 65 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 95 |
| % minor | 3 |
| % moderate | 2 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 40 |
| % fair | 48 |
| % poor | 12 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 2,610 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 3,160 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# TALLERING STATION

## PASTORAL LEASE 3114/434 + GRAZING RIGHTS ON LEASE 3116/6262

**Area:** About 165,181 ha (legal); 164,197 ha (computed)

**Area surveyed:** 166,511 ha (whole station plus lease 3116/6262)

**Land Conservation District:** Murchison

**Shire(s):** Mullewa; Murchison; Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within pastoral lease = 1,157 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 485 | 0.3 |
| 2 | Hills with mixed shrublands | 1 | 126 | 0.1 |
| 4 | Breakaways and stony plains | 2 | 7,442 | 4.5 |
| 6 | Granite plains and rises | 2 | 2,964 | 1.8 |
| 7 | Undulating acacia country | 1 | 48,296 | 29.0 |
| 11 | Sandplains with dense mixed shrublands | 1 | 20,432 | 12.3 |
| 12 | Acacia sandplains | 1 | 27,732 | 16.6 |
| 13 | Mulga hardpan plains | 1 | 50,034 | 30.0 |
| 17 | Chenopod alluvial plains | 1 | 5,640 | 3.4 |
| 19 | Plains with eucalypt woodlands | 1 | 3,362 | 2.0 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 17 | Yewin | 5,640 | 3.4 | 0 | 6 | 66 | 17 | 17 | 0 | 17 | 50 | 33 | 706 | 806 |
| Mod. high | 13 | Tindalarra | 50,034 | 30.1 | 0 | 72 | 67 | 25 | 8 | 0 | 7 | 28 | 65 | 3,099 | 4,170 |
| Moderate | 6 | Bandy | 52 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Moderate | 6 | Challenge | 2,912 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164 | 182 |
| Moderate | 4 | Narryer | 1,917 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 102 | 120 |
| Moderate | 19 | Pindar | 3,362 | 2.0 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 195 | 210 |
| Moderate | 4 | Waguin | 5,525 | 3.3 | 0 | 4 | 100 | 0 | 0 | 0 | 25 | 50 | 25 | 326 | 345 |
| Low | 1 | Gabanintha | 239 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 12 |
| Low | 12 | Kalli | 27,732 | 16.6 | 0 | 19 | 95 | 5 | 0 | 0 | 58 | 21 | 21 | 1,270 | 1,387 |
| Low | 7 | Nerramyne | 48,296 | 29.0 | 0 | 52 | 100 | 0 | 0 | 0 | 37 | 42 | 21 | 2,111 | 2,415 |
| Low | 1 | Norie | 247 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 12 |
| Very low | 2 | Tallering | 126 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Negligible | 11 | Joseph | 20,432 | 12.3 | 0 | 8 | 100 | 0 | 0 | 0 | 87 | 13 | 0 | 409 | 409 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 5,640 | 3.4 | 0 | 6 | 66 | 17 | 17 | 0 | 17 | 50 | 33 | 706 | 806 |
| Moderately high | 50,034 | 30.0 | 0 | 72 | 67 | 25 | 8 | 0 | 7 | 28 | 65 | 3,099 | 4,170 |
| Moderate | 13,767 | 8.3 | 0 | 6 | 100 | 0 | 0 | 0 | 17 | 66 | 17 | 790 | 861 |
| Low | 76,512 | 45.9 | 0 | 71 | 99 | 1 | 0 | 0 | 42 | 37 | 21 | 3,402 | 3,826 |
| Very low | 126 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Negligible | 20,432 | 12.3 | 0 | 8 | 100 | 0 | 0 | 0 | 87 | 13 | 0 | 409 | 409 |
| **Total** | 166,511 | 100.0 | 0 | 163 | 84 | 12 | 4 | 0 | 27 | 33 | 40 | 8,410 | 10,076 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 46 | 34 | 20 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of area surveyed) |
| Number of traverse points | 163 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 84 |
| % minor | 12 |
| % moderate | 4 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 27 |
| % fair | 33 |
| % poor | 40 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 8,410 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 10,080 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# THUNDELARRA STATION

## PASTORAL LEASE 3114/567

**Area:** About 156,128 ha (legal); 156,253 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 2,426†ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 7,099 | 4.5 |
| 2 | Hills with mixed shrublands | 1 | 3,248 | 2.1 |
| 3 | Hills with chenopods | 1 | 984 | 0.6 |
| 4 | Breakaways and stony plains | 3 | 23,670 | 15.1 |
| 6 | Granite plains and rises | 1 | 11,912 | 7.6 |
| 7 | Undulating acacia country | 3 | 4,286 | 2.7 |
| 12 | Acacia sandplains | 1 | 8,886 | 5.7 |
| 13 | Mulga hardpan plains | 4 | 72,744 | 46.6 |
| 14 | Mulga plains with some wanderrie | 1 | 176 | 0.1 |
| 16 | Sandy acacia plains with wanderrie | 1 | 2,481 | 1.6 |
| 17 | Chenopod alluvial plains | 2 | 4,675 | 3.0 |
| 18 | Calcreted old drainage systems | 2 | 8,349 | 5.3 |
| 20 | Lake country | 1 | 7,742 | 5.0 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 7,691 | 4.9 | 0 | 8 | 87 | 13 | 0 | 0 | 50 | 25 | 25 | 862 | 1,099 |
| High | 17 | Ero | 2,974 | 1.9 | 0 | 14 | 86 | 14 | 0 | 0 | 71 | 29 | 0 | 388 | 425 |
| High | 18 | Mileura | 7,231 | 4.6 | 0 | 23 | 91 | 9 | 0 | 0 | 53 | 30 | 17 | 841 | 1,033 |
| High | 17 | Roderick | 1,701 | 1.1 | 0 | 6 | 100 | 0 | 0 | 0 | 17 | 83 | 0 | 182 | 243 |
| Mod. high | 18 | Cunyu | 1,118 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69 | 93 |
| Mod. high | 3 | Graves | 984 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 82 |
| Mod. high | 7 | Nubev | 2,684 | 1.7 | 0 | 6 | 100 | 0 | 0 | 0 | 66 | 17 | 17 | 206 | 224 |
| Mod. high | 4 | Sherwood | 6,771 | 4.3 | 0 | 6 | 83 | 17 | 0 | 0 | 33 | 67 | 0 | 489 | 564 |
| Mod. high | 13 | Tindalarra | 25,606 | 16.4 | 439 | 44 | 83 | 7 | 5 | 5 | 34 | 23 | 43 | 1,733 | 2,134 |
| Moderate | 6 | Challenge | 11,912 | 7.6 | 0 | 13 | 100 | 0 | 0 | 0 | 23 | 62 | 15 | 671 | 745 |
| Moderate | 13 | Jundee | 7,823 | 5.0 | 0 | 10 | 100 | 0 | 0 | 0 | 60 | 30 | 10 | 463 | 489 |
| Moderate | 4 | Olympic | 16,834 | 10.8 | 0 | 24 | 100 | 0 | 0 | 0 | 58 | 38 | 4 | 999 | 1,052 |
| Moderate | 13 | Rainbow | 4,891 | 3.1 | 0 | 6 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 245 | 305 |
| Moderate | 7 | Violet | 1,536 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 86 | 96 |
| Moderate | 4 | Waguin | 65 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Moderate | 13 | Woodline | 34,424 | 22.0 | 0 | 26 | 100 | 0 | 0 | 0 | 46 | 42 | 12 | 1,916 | 2,152 |
| Moderate | 14 | Yanganoo | 176 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 11 |
| Low | 1 | Gabanintha | 7,099 | 4.5 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 67 | 0 | 307 | 355 |
| Low | 12 | Kalli | 8,886 | 5.7 | 0 | 8 | 100 | 0 | 0 | 0 | 87 | 13 | 0 | 433 | 444 |
| Low | 7 | Nerramyne | 66 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Low | 16 | Yowie | 2,481 | 1.6 | 0 | 6 | 100 | 0 | 0 | 0 | 33 | 50 | 17 | 107 | 124 |
| Very low | 2 | Tallering | 3,248 | 2.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 | 108 |
| Nil | 20 | Lake bed | 51 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) | Pcc (dse) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | (from table 2) | |
| High | 19,596 | 12.5 | 0 | 51 | 90 | 10 | 0 | 0 | 53 | 35 | 12 | 2,273 | 2,800 |
| Moderately high | 37,163 | 23.8 | 439 | 56 | 85 | 7 | 4 | 4 | 38 | 26 | 36 | 2,570 | 3,097 |
| Moderate | 77,662 | 49.7 | 0 | 79 | 100 | 0 | 0 | 0 | 45 | 39 | 16 | 4,393 | 4,854 |
| Low | 18,533 | 11.9 | 0 | 17 | 100 | 0 | 0 | 0 | 59 | 35 | 6 | 850 | 927 |
| Very low | 3,248 | 2.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 | 108 |
| Nil | 51 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 156,253 | 100.0 | 439 | 203 | 94 | 4 | 1 | 1 | 46 | 34 | 20 | 10,189 | 11,786 |
| **Survey average for land systems on this station** | | | | | 95 | 4 | 1 | ^0 | 40 | 35 | 25 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

**Station summary**

| | |
|---|---|
| Severely degraded and eroded (ha) | 439 (0.3% of station) |
| Number of traverse points | 203 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 94 |
| % minor | 4 |
| % moderate | 1 |
| % severe | 1 |
| Perennial vegetation | |
| % good | 46 |
| % fair | 34 |
| % poor | 20 |
| [!] Suggested carrying capacity (dse) over summer, following an effective winter season | 10,190 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 11,790 |

[!] The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# WAGGA WAGGA STATION

## PASTORAL LEASE 3114/497

**Area:** About 89,729 ha (legal) 89,851 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 938 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 13,711 | 15.3 |
| 2 | Hills with mixed shrublands | 1 | 200 | 0.2 |
| 4 | Breakaways and stony plains | 1 | 278 | 0.3 |
| 6 | Granite plains and rises | 1 | 10,239 | 11.4 |
| 12 | Acacia sandplains | 1 | 2,899 | 3.2 |
| 13 | Mulga hardpan plains | 4 | 48,888 | 54.4 |
| 15 | Chenopod washplains | 1 | 328 | 0.4 |
| 18 | Calcreted old drainage systems | 1 | 1,510 | 1.7 |
| 20 | Lake country | 1 | 11,799 | 13.1 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 11,093 | 12.3 | 0 | 22 | 86 | 14 | 0 | 0 | 63 | 23 | 14 | 1,351 | 1,585 |
| High | 18 | Mileura | 1,510 | 1.7 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 154 | 216 |
| Mod. high | 15 | Tango | 328 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 27 |
| Mod. high | 13 | Tindalarra | 36,833 | 41.0 | 76 | 67 | 96 | 3 | 1 | 0 | 15 | 45 | 40 | 2,459 | 3,069 |
| Moderate | 6 | Challenge | 10,239 | 11.4 | 0 | 15 | 100 | 0 | 0 | 0 | 60 | 27 | 13 | 604 | 640 |
| Moderate | 13 | Hamilton | 7,322 | 8.1 | 0 | 23 | 100 | 0 | 0 | 0 | 26 | 57 | 17 | 413 | 458 |
| Moderate | 13 | Jundee | 1,893 | 2.1 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 105 | 118 |
| Moderate | 4 | Waguin | 278 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 17 |
| Moderate | 13 | Woodline | 2,840 | 3.2 | 0 | 8 | 100 | 0 | 0 | 0 | 0 | 63 | 37 | 152 | 178 |
| Low | 1 | Gabanintha | 1,904 | 2.1 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 82 | 95 |
| Low | 12 | Kalli | 2,899 | 3.2 | 0 | 7 | 100 | 0 | 0 | 0 | 43 | 57 | 0 | 128 | 145 |
| Low | 1 | Norie | 11,807 | 13.1 | 0 | 8 | 87 | 13 | 0 | 0 | 63 | 37 | 0 | 547 | 590 |
| Very low | 2 | Tallering | 200 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 7 |
| Nil | 20 | Lake bed | 707 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 12,602 | 14.0 | 0 | 23 | 87 | 13 | 0 | 0 | 61 | 22 | 17 | 1,505 | 1,800 |
| Moderately high | 37,161 | 41.4 | 76 | 67 | 96 | 3 | 1 | 0 | 15 | 45 | 40 | 2,481 | 3,097 |
| Moderate | 22,571 | 25.1 | 0 | 49 | 100 | 0 | 0 | 0 | 31 | 51 | 18 | 1,290 | 1,411 |
| Low | 16,610 | 18.5 | 0 | 16 | 94 | 6 | 0 | 0 | 50 | 50 | 0 | 757 | 831 |
| Very low | 200 | 0.2 | 0 | 0 | 100 | 0 | 0 | 0 | 56 | 44 | 0 | 6 | 7 |
| Unsuitable | 707 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 89,851 | 100.0 | 76 | 155 | 95 | 4 | 1 | 0 | 30 | 44 | 26 | 6,039 | 7,146 |
| **Survey average for land systems on this station** | | | | | 95 | 4 | 1 | ^0 | 39 | 37 | 24 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 76 (< 0.1% of station) |
| Number of traverse points | 155 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 95 |
| % minor | 4 |
| % moderate | 1 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 30 |
| % fair | 44 |
| % poor | 26 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 6,040 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 7,150 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# WANARRA STATION

## PASTORAL LEASE 3114/1252

**Area:** About 107,916 ha (legal) 107,167 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Perenjori

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 2,709 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 627 | 0.6 |
| 2 | Hills with mixed shrublands | 1 | 188 | 0.2 |
| 3 | Hills with chenopods | 1 | 1,664 | 1.6 |
| 4 | Breakaways and stony plains | 3 | 12,721 | 11.9 |
| 6 | Granite plains and rises | 2 | 4,920 | 4.6 |
| 7 | Undulating acacia country | 1 | 802 | 0.7 |
| 8 | Chenopod plains and low rises | 1 | 2,113 | 2.0 |
| 11 | Sandplains with dense mixed shrublands | 1 | 19,384 | 18.1 |
| 12 | Acacia sandplains | 1 | 12,378 | 11.6 |
| 13 | Mulga hardpan plains | 2 | 4,069 | 3.8 |
| 16 | Sandy acacia plains with wanderrie | 2 | 16,527 | 15.4 |
| 17 | Chenopod alluvial plains | 1 | 337 | 0.3 |
| 19 | Plains with eucalypt woodlands | 2 | 9,969 | 9.3 |
| 20 | Lake country | 1 | 21,468 | 20.0 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 14,695 | 13.7 | 0 | 7 | 100 | 0 | 0 | 0 | 43 | 43 | 14 | 1,799 | 2,099 |
| Mod. high | 17 | Campsite | 337 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 28 |
| Mod. high | 19 | Doney | 4,539 | 4.2 | 0 | 12 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 360 | 378 |
| Mod. high | 4 | Euchre | 4,148 | 3.9 | 0 | 14 | 100 | 0 | 0 | 0 | 79 | 21 | 0 | 335 | 346 |
| Mod. high | 3 | Graves | 1,664 | 1.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 139 |
| Mod. high | 8 | Moriarty | 2,113 | 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 154 | 176 |
| Mod. high | 13 | Tindalarra | 3,162 | 3.0 | 0 | 9 | 100 | 0 | 0 | 0 | 33 | 56 | 11 | 233 | 264 |
| Moderate | 6 | Bandy | 1,386 | 1.3 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 87 | 87 |
| Moderate | 6 | Challenge | 3,534 | 3.3 | 0 | 5 | 100 | 0 | 0 | 0 | 60 | 40 | 0 | 211 | 221 |
| Moderate | 4 | Olympic | 5,090 | 4.7 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 303 | 318 |
| Moderate | 19 | Pindar | 5,430 | 5.1 | 0 | 6 | 100 | 0 | 0 | 0 | 50 | 33 | 17 | 315 | 339 |
| Moderate | 4 | Waguin | 3,484 | 3.3 | 0 | 6 | 100 | 0 | 0 | 0 | 83 | 17 | 0 | 214 | 218 |
| Moderate | 13 | Yalluwin | 907 | 0.8 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 54 | 57 |
| Low | 1 | Gabanintha | 155 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 8 |
| Low | 12 | Kalli | 12,378 | 11.6 | 0 | 19 | 100 | 0 | 0 | 0 | 95 | 5 | 0 | 613 | 619 |
| Low | 7 | Nerramyne | 802 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 40 |
| Low | 1 | Norie | 472 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 24 |
| Low | 2 | Singleton | 188 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 |
| Low | 16 | Tealtoo | 526 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 26 |
| Low | 16 | Yowie | 16,000 | 14.9 | 0 | 36 | 100 | 0 | 0 | 0 | 39 | 53 | 8 | 702 | 800 |
| Negligible | 11 | Joseph | 19,384 | 18.1 | 0 | 19 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 388 | 388 |
| Nil | 20 | Lake bed | 6,773 | 6.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 14,695 | 13.7 | 0 | 7 | 100 | 0 | 0 | 0 | 43 | 43 | 14 | 1,799 | 2,099 |
| Moderately high | 15,963 | 15.0 | 0 | 35 | 100 | 0 | 0 | 0 | 63 | 34 | 3 | 1,229 | 1,330 |
| Moderate | 19,831 | 18.5 | 0 | 25 | 100 | 0 | 0 | 0 | 72 | 24 | 4 | 1,183 | 1,239 |
| Low | 30,521 | 28.4 | 0 | 55 | 100 | 0 | 0 | 0 | 58 | 36 | 6 | 1,413 | 1,526 |
| Negligible | 19,384 | 18.1 | 0 | 19 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 388 | 388 |
| Nil | 6,773 | 6.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| **Total** | 107,167 | 100.0 | 0 | 141 | 100 | 0 | 0 | 0 | 67 | 29 | 4 | 6,012 | 6,582 |
| **Survey average for land systems on this station** | | | | | 97 | 2 | 1 | ^0 | 50 | 34 | 16 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 141 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 100 |
| % minor | 0 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 67 |
| % fair | 29 |
| % poor | 4 |
| ¦ Suggested carrying capacity (dse) over summer, following an effective winter season | 6,010 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 6,580 |

¦ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# WANDINA STATION

## PASTORAL LEASE 3114/900 + GRAZING RIGHTS ON LEASE 3116/5916

**Area:** About 79,727 ha (legal) 79,793 ha (computed)

**Area surveyed:** 80,379 ha (whole station plus lease 3116/5916)

**Land Conservation District:** Murchison

**Shire(s):** Mullewa

Approximate area of various reserves, freehold and Vacant Crown Land within pastoral lease = 5,915 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 2,262 | 2.8 |
| 2 | Hills with mixed shrublands | 1 | 2,539 | 3.2 |
| 4 | Breakaways and stony plains | 1 | 1,076 | 1.3 |
| 6 | Granite plains and rises | 1 | 21 | ^0.0 |
| 7 | Undulating acacia country | 1 | 27,408 | 34.1 |
| 11 | Sandplains with dense mixed shrublands | 1 | 15,621 | 19.4 |
| 12 | Acacia sandplains | 1 | 14,311 | 17.8 |
| 13 | Mulga hardpan plains | 1 | 14,407 | 17.9 |
| 17 | Chenopod alluvial plains | 2 | 2,114 | 2.6 |
| 19 | Plains with eucalypt woodlands | 1 | 620 | 0.8 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | Scc* (dse) | Pcc** (dse) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | | |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 17 | Ero | 189 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 27 |
| High | 17 | Yewin | 1,925 | 2.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 241 | 275 |
| Mod. high | 4 | Euchre | 1,076 | 1.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 85 | 90 |
| Mod. high | 13 | Tindalarra | 14,407 | 17.9 | 0 | 13 | 100 | 0 | 0 | 0 | 46 | 23 | 31 | 971 | 1,201 |
| Moderate | 6 | Challenge | 21 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Moderate | 19 | Pindar | 620 | 0.8 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 75 | 25 | 34 | 39 |
| Low | 1 | Gabanintha | 471 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 24 |
| Low | 12 | Kalli | 14,311 | 17.8 | 0 | 11 | 100 | 0 | 0 | 0 | 91 | 9 | 0 | 703 | 716 |
| Low | 7 | Nerramyne | 27,408 | 34.1 | 0 | 23 | 100 | 0 | 0 | 0 | 79 | 17 | 4 | 1,313 | 1,370 |
| Very low | 2 | Tallering | 2,539 | 3.2 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 79 | 86 |
| Very low | 1 | Watson | 1,791 | 2.2 | 0 | 4 | 100 | 0 | 0 | 0 | 25 | 25 | 50 | 53 | 60 |
| Negligible | 11 | Joseph | 15,621 | 19.4 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 312 | 312 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) | Pcc (dse) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | (from table 2) | |
| High | 2,114 | 2.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 260 | 302 |
| Moderately high | 15,483 | 19.3 | 0 | 13 | 100 | 0 | 0 | 0 | 46 | 23 | 31 | 1,056 | 1,290 |
| Moderate | 641 | 0.8 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 75 | 25 | 35 | 40 |
| Low | 42,190 | 52.5 | 0 | 34 | 100 | 0 | 0 | 0 | 82 | 15 | 3 | 2,036 | 2,110 |
| Very low | 4,330 | 5.4 | 0 | 6 | 100 | 0 | 0 | 0 | 33 | 33 | 34 | 132 | 144 |
| Negligible | 15,621 | 19.4 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 312 | 312 |
| **Total** | 80,379 | 100.0 | 0 | 60 | 100 | 0 | 0 | 0 | 65 | 22 | 13 | 3,831 | 4,198 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 46 | 34 | 20 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of area surveyed) |
| Number of traverse points | 60 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 100 |
| % minor | 0 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 65 |
| % fair | 22 |
| % poor | 13 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 3,830 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 4,200 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# WARRIEDAR STATION

## PASTORAL LEASE 3114/1123

**Area:** About 72,220 ha (legal) 71,863 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Perenjori, Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 248 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 3 | 9,751 | 13.6 |
| 2 | Hills with mixed shrublands | 2 | 7,013 | 9.8 |
| 3 | Hills with chenopods | 1 | 2,932 | 4.1 |
| 4 | Breakaways and stony plains | 4 | 3,873 | 5.4 |
| 5 | Breakaways and chenopod plains | 1 | 1,542 | 2.1 |
| 6 | Granite plains and rises | 2 | 3,876 | 5.4 |
| 7 | Undulating acacia country | 2 | 9,641 | 13.4 |
| 8 | Chenopod plains and low rises | 1 | 4,442 | 6.2 |
| 12 | Acacia sandplains | 1 | 6,199 | 8.6 |
| 13 | Mulga hardpan plains | 5 | 15,547 | 21.6 |
| 16 | Sandy acacia plains with wanderrie | 3 | 5,907 | 8.2 |
| 18 | Calcreted old drainage systems | 1 | 7 | ^0.0 |
| 20 | Lake country | 1 | 1,135 | 1.6 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 1,113 | 1.5 | 0 | 7 | 100 | 0 | 0 | 0 | 57 | 29 | 14 | 133 | 159 |
| High | 18 | Mileura | 7 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Mod. high | 4 | Euchre | 586 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 49 |
| Mod. high | 3 | Graves | 2,932 | 4.1 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 217 | 244 |
| Mod. high | 5 | Hootanui | 1,542 | 2.1 | 79 | 7 | 86 | 14 | 0 | 0 | 43 | 57 | 0 | 114 | 129 |
| Mod. high | 8 | Moriarty | 4,442 | 6.2 | 0 | 6 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 344 | 370 |
| Mod. high | 4 | Sherwood | 2 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mod. high | 13 | Tindalarra | 8,144 | 11.3 | 163 | 23 | 91 | 9 | 0 | 0 | 26 | 57 | 17 | 576 | 679 |
| Moderate | 6 | Bandy | 73 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 5 |
| Moderate | 6 | Challenge | 3,803 | 5.3 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 0 | 33 | 214 | 238 |
| Moderate | 16 | Illaara | 632 | 0.9 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 35 | 40 |
| Moderate | 13 | Jundee | 1,506 | 2.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 86 | 94 |
| Moderate | 4 | Olympic | 99 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 |
| Moderate | 13 | Rainbow | 4,610 | 6.4 | 0 | 17 | 94 | 0 | 0 | 6 | 18 | 64 | 18 | 257 | 288 |
| Moderate | 7 | Violet | 2,769 | 3.9 | ^0 | 5 | 100 | 0 | 0 | 0 | 80 | 20 | 0 | 156 | 173 |
| Moderate | 4 | Waguin | 3,185 | 4.4 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 188 | 199 |
| Moderate | 13 | Woodline | 50 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Moderate | 13 | Yalluwin | 1,236 | 1.7 | 0 | 4 | 100 | 0 | 0 | 0 | 50 | 50 | 0 | 73 | 77 |
| Low | 1 | Gabanintha | 7,212 | 10.0 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 312 | 361 |
| Low | 12 | Kalli | 6,199 | 8.6 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 291 | 310 |
| Low | 7 | Nerramyne | 6,873 | 9.6 | 0 | 9 | 100 | 0 | 0 | 0 | 89 | 11 | 0 | 336 | 344 |
| Low | 1 | Norie | 160 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 8 |
| Low | 2 | Singleton | 1,717 | 2.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 86 |
| Low | 16 | Tealtoo | 3,102 | 4.3 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 141 | 155 |
| Low | 16 | Yowie | 2,173 | 3.0 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 98 | 109 |
| Very low | 2 | Tallering | 5,295 | 7.4 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 169 | 177 |
| Very low | 1 | Watson | 2,380 | 3.3 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 71 | 79 |
| Nil | 20 | Lake bed | 22 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 1,119 | 1.6 | 0 | 7 | 100 | 0 | 0 | 0 | 57 | 29 | 14 | 134 | 160 |
| Moderately high | 17,648 | 24.5 | 242 | 38 | 92 | 8 | 0 | 0 | 34 | 55 | 11 | 1,297 | 1,471 |
| Moderate | 17,964 | 25.0 | ^0 | 32 | 97 | 0 | 0 | 3 | 38 | 50 | 12 | 1,022 | 1,123 |
| Low | 27,435 | 38.2 | 0 | 20 | 100 | 0 | 0 | 0 | 90 | 10 | 0 | 1,264 | 1,372 |
| Very low | 7,675 | 10.7 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 240 | 256 |
| Nil | 22 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 71,863 | 100.0 | 242 | 100 | 96 | 3 | 0 | 1 | 50 | 41 | 9 | 3,957 | 4,382 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 43 | 35 | 22 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 242 (0.3% of station) |
| Number of traverse points | 100 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 96 |
| % minor | 3 |
| % moderate | 0 |
| % severe | 1 |
| Perennial vegetation | |
| % good | 50 |
| % fair | 41 |
| % poor | 9 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 3,960 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 4,380 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# WHITE WELLS STATION

## PASTORAL LEASE 3114/529

**Area:** About 68,619 ha (legal) 68,377 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Perenjori

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 287 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 482 | 0.7 |
| 3 | Hills with chenopods | 1 | 693 | 1.0 |
| 4 | Breakaways and stony plains | 3 | 9,430 | 13.8 |
| 6 | Granite plains and rises | 2 | 2,095 | 3.1 |
| 8 | Chenopod plains and low rises | 1 | 1,110 | 1.6 |
| 11 | Sandplains with dense mixed shrublands | 2 | 39,512 | 57.8 |
| 12 | Acacia sandplains | 1 | 475 | 0.7 |
| 13 | Mulga hardpan plains | 1 | 2,320 | 3.4 |
| 16 | Sandy acacia plains with wanderrie | 1 | 3,626 | 5.3 |
| 19 | Plains with eucalypt woodlands | 1 | 6,496 | 9.5 |
| 20 | Lake country | 1 | 1,982 | 2.9 |
| | Cleared land | - | 154 | 0.2 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 1,982 | 2.9 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 198 | 283 |
| Mod. high | 4 | Euchre | 7,522 | 11.0 | 0 | 13 | 100 | 0 | 0 | 0 | 69 | 23 | 8 | 590 | 627 |
| Mod. high | 3 | Graves | 693 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 58 |
| Mod. high | 8 | Moriarty | 1,110 | 1.6 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 93 | 93 |
| Moderate | 6 | Bandy | 1,426 | 2.1 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 89 | 89 |
| Moderate | 6 | Challenge | 669 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 42 |
| Moderate | 4 | Olympic | 1,158 | 1.7 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 72 | 72 |
| Moderate | 19 | Pindar | 6,496 | 9.5 | 0 | 6 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 406 | 406 |
| Moderate | 13 | Rainbow | 2,320 | 3.4 | 0 | 10 | 100 | 0 | 0 | 0 | 20 | 70 | 10 | 131 | 145 |
| Moderate | 4 | Waguin | 750 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 47 |
| Low | 11 | Bannar | 5,415 | 7.9 | 0 | 14 | 100 | 0 | 0 | 0 | 86 | 14 | 0 | 263 | 271 |
| Low | 1 | Gabanintha | 482 | 0.7 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 24 | 24 |
| Low | 12 | Kalli | 475 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 24 |
| Low | 16 | Yowie | 3,626 | 5.3 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 169 | 181 |
| Negligible | 11 | Joseph | 34,098 | 49.9 | 0 | 43 | 100 | 0 | 0 | 0 | 95 | 5 | 0 | 682 | 682 |
| Cultivated land | | | 154 | 0.2 | | | | | | | | | | 462 | 462 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 1,982 | 2.9 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 198 | 283 |
| Moderately high | 9,325 | 13.6 | 0 | 15 | 100 | 0 | 0 | 0 | 73 | 20 | 7 | 733 | 777 |
| Moderate | 12,820 | 18.8 | 0 | 20 | 100 | 0 | 0 | 0 | 60 | 35 | 5 | 780 | 801 |
| Low | 9,998 | 14.6 | 0 | 18 | 100 | 0 | 0 | 0 | 83 | 17 | 0 | 479 | 500 |
| Negligible | 34,098 | 49.9 | 0 | 43 | 100 | 0 | 0 | 0 | 95 | 5 | 0 | 682 | 682 |
| Cultivated land | 154 | 0.2 | | | | | | | | | | 462 | 462 |
| **Total** | 68,377 | 100.0 | 0 | 98 | 100 | 0 | 0 | 0 | 81 | 17 | 2 | 3,334 | 3,505 |
| **Survey average for land systems on this station** | | | | | 98 | 1 | ^0 | ^0 | 58 | 30 | 12 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 98 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 100 |
| % minor | 0 |
| % moderate | 0 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 81 |
| % fair | 17 |
| % poor | 2 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 3,330 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 3,510 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# WINDIMURRA STATION

## PASTORAL LEASE 3114/1150

**Area:** About 260,065 ha (legal) 260,236 ha (computed)
**Area surveyed:** Whole station
**Land Conservation District:** Sandstone
**Shire(s):** Sandstone, Mt Magnet
Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 2,752 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 15,352 | 5.9 |
| 4 | Breakaways and stony plains | 2 | 24,970 | 9.6 |
| 5 | Breakaways and chenopod plains | 2 | 9,453 | 3.6 |
| 6 | Granite plains and rises | 2 | 4,047 | 1.6 |
| 7 | Undulating acacia country | 2 | 3,666 | 1.4 |
| 8 | Chenopod plains and low rises | 2 | 11,947 | 4.6 |
| 9 | Stony non-chenopod plains | 2 | 256 | 0.1 |
| 10 | Spinifex sandplains | 3 | 33,745 | 13.0 |
| 12 | Acacia sandplains | 1 | 27,886 | 10.7 |
| 13 | Mulga hardpan plains | 3 | 21,419 | 8.2 |
| 14 | Mulga plains with some wanderrie | 2 | 59,728 | 23.0 |
| 15 | Chenopod washplains | 1 | 1,434 | 0.6 |
| 16 | Sandy acacia plains with wanderrie | 1 | 11,637 | 4.5 |
| 17 | Chenopod alluvial plains | 3 | 27,744 | 10.7 |
| 18 | Calcreted old drainage systems | 1 | 4,816 | 1.9 |
| 20 | Lake country | 1 | 2,137 | 0.8 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | Scc* (dse) | Pcc** (dse) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | | |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Very high | 17 | Merbla | 20,313 | 7.8 | 1,132 | 24 | 79 | 13 | 4 | 4 | 8 | 21 | 71 | 2,263 | 4,063 |
| High | 20 | Carnegie | 2,087 | 0.8 | 0 | 3 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 298 | 298 |
| High | 17 | Ero | 624 | 0.2 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 63 | 89 |
| High | 5 | Gumbreak | 2,380 | 0.9 | 0 | 5 | 80 | 0 | 20 | 0 | 0 | 20 | 80 | 167 | 340 |
| High | 17 | Steer | 6,807 | 2.6 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 641 | 972 |
| Mod. high | 18 | Cunyu | 4,816 | 1.9 | 256 | 7 | 86 | 14 | 0 | 0 | 0 | 0 | 100 | 297 | 401 |
| Mod. high | 8 | Gransal | 2,693 | 1.0 | 0 | 5 | 100 | 0 | 0 | 0 | 80 | 20 | 0 | 218 | 224 |
| Mod. high | 5 | Hootanui | 7,073 | 2.7 | 0 | 7 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 464 | 589 |
| Mod. high | 8 | Nallex | 9,253 | 3.6 | 0 | 13 | 100 | 0 | 0 | 0 | 0 | 23 | 77 | 593 | 771 |
| Mod. high | 7 | Nubev | 550 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 46 |
| Mod. high | 4 | Sherwood | 19,871 | 7.6 | 44 | 9 | 100 | 0 | 0 | 0 | 89 | 11 | 0 | 1,436 | 1,656 |
| Mod. high | 15 | Tango | 1,434 | 0.6 | 0 | 2 | 50 | 50 | 0 | 0 | 50 | 50 | 0 | 97 | 120 |
| Moderate | 6 | Bandy | 463 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 29 |
| Moderate | 6 | Challenge | 3,584 | 1.4 | 0 | 8 | 100 | 0 | 0 | 0 | 38 | 50 | 12 | 206 | 224 |
| Moderate | 9 | Felix | 83 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 |
| Moderate | 13 | Jundee | 3,707 | 1.4 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 212 | 232 |
| Moderate | 14 | Monk | 40,354 | 15.5 | 0 | 63 | 100 | 0 | 0 | 0 | 32 | 43 | 25 | 2,276 | 2,522 |
| Moderate | 13 | Rainbow | 81 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 5 |
| Moderate | 7 | Violet | 3,116 | 1.2 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 175 | 195 |
| Moderate | 4 | Waguin | 5,100 | 2.0 | 0 | 5 | 100 | 0 | 0 | 0 | 60 | 40 | 0 | 305 | 319 |
| Moderate | 9 | Windarra | 174 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 11 |
| Moderate | 13 | Woodline | 17,631 | 6.8 | 5 | 7 | 100 | 0 | 0 | 0 | 0 | 14 | 86 | 981 | 1,102 |
| Moderate | 14 | Yanganoo | 19,373 | 7.4 | 0 | 20 | 85 | 0 | 5 | 10 | 30 | 10 | 60 | 1,069 | 1,211 |
| Low | 12 | Kalli | 27,886 | 10.7 | 0 | 15 | 93 | 7 | 0 | 0 | 27 | 46 | 27 | 1,308 | 1,394 |
| Low | 1 | Naluthanna | 12,372 | 4.8 | 0 | 13 | 85 | 15 | 0 | 0 | 8 | 46 | 46 | 505 | 619 |
| Low | 1 | Teutonic | 2,980 | 1.1 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 119 | 149 |
| Low | 16 | Yowie | 11,637 | 4.5 | 0 | 8 | 100 | 0 | 0 | 0 | 75 | 25 | 0 | 524 | 582 |
| Very low | 10 | Bullimore | 20,580 | 7.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 675 | 686 |
| Very low | 10 | Marmion | 12,218 | 4.7 | 0 | 10 | 100 | 0 | 0 | 0 | 90 | 0 | 10 | 401 | 407 |
| Very low | 10 | Tyrrell | 947 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 32 |
| Nil | 20 | Lake bed | 50 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Very high | 20,313 | 7.8 | 1,132 | 24 | 79 | 13 | 4 | 4 | 8 | 21 | 71 | 2,263 | 4,063 |
| High | 11,898 | 4.5 | 0 | 10 | 90 | 0 | 10 | 0 | 40 | 20 | 40 | 1,169 | 1,700 |
| Moderately high | 45,690 | 17.6 | 299 | 43 | 95 | 5 | 0 | 0 | 30 | 14 | 56 | 3,142 | 3,808 |
| Moderate | 93,665 | 36.0 | 5 | 105 | 97 | 0 | 1 | 2 | 31 | 35 | 34 | 5,270 | 5,854 |
| Low | 54,875 | 21.1 | 0 | 37 | 92 | 8 | 0 | 0 | 30 | 40 | 30 | 2,455 | 2,744 |
| Very low | 33,745 | 13.0 | 0 | 10 | 100 | 0 | 0 | 0 | 90 | 0 | 10 | 1,107 | 1,125 |
| Nil | 50 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 260,236 | 100.0 | 1,437 | 229 | 95 | 3 | 1 | 1 | 31 | 28 | 41 | 15,406 | 19,294 |
| **Survey average for land systems on this station** | | | | | 95 | 4 | 1 | ^0 | 44 | 31 | 25 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 1,437 (0.6% of station) |
| Number of traverse points | 229 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 95 |
| % minor | 3 |
| % moderate | 1 |
| % severe | 1 |
| Perennial vegetation | |
| % good | 31 |
| % fair | 28 |
| % poor | 41 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 15,410 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 19,290 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# WINDSOR STATION

## PASTORAL LEASE 3114/1207

**Area:** About 230,755 ha (legal) 230,908 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Cue, Mt Magnet, Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 134 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 3 | 4,025 | 1.7 |
| 4 | Breakaways and stony plains | 2 | 19,870 | 8.6 |
| 5 | Breakaways and chenopod plains | 1 | 685 | 0.3 |
| 6 | Granite plains and rises | 2 | 7,605 | 3.3 |
| 7 | Undulating acacia country | 1 | 139 | 0.1 |
| 8 | Chenopod plains and low rises | 2 | 1,580 | 0.7 |
| 9 | Stony non-chenopod plains | 1 | 46 | ^0.0 |
| 10 | Spinifex sandplains | 1 | 56,869 | 24.6 |
| 12 | Acacia sandplains | 1 | 49,205 | 21.3 |
| 13 | Mulga hardpan plains | 4 | 68,549 | 29.7 |
| 14 | Mulga plains with some wanderrie | 2 | 19,302 | 8.4 |
| 17 | Chenopod alluvial plains | 2 | 1,519 | 0.7 |
| 18 | Calcreted old drainage systems | 3 | 1,452 | 0.6 |
| 20 | Lake country | 1 | 60 | ^0.0 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Very high | 17 | Merbla | 665 | 0.3 | 112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 133 |
| High | 20 | Carnegie | 60 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 9 |
| High | 17 | Ero | 854 | 0.4 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 53 | 122 |
| High | 5 | Gumbreak | 685 | 0.3 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 98 | 98 |
| High | 18 | Mileura | 624 | 0.3 | 0 | 3 | 67 | 0 | 33 | 0 | 0 | 0 | 100 | 39 | 89 |
| Mod. high | 18 | Cunyu | 662 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 55 |
| Mod. high | 8 | Gransal | 1,387 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 116 |
| Mod. high | 8 | Nallex | 193 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 16 |
| Mod. high | 4 | Sherwood | 13,154 | 5.7 | 0 | 17 | 100 | 0 | 0 | 0 | 82 | 6 | 12 | 1,043 | 1,096 |
| Mod. high | 13 | Tindalarra | 342 | 0.1 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 29 | 29 |
| Moderate | 6 | Bandy | 68 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Moderate | 6 | Challenge | 7,537 | 3.3 | 0 | 14 | 100 | 0 | 0 | 0 | 50 | 36 | 14 | 439 | 471 |
| Moderate | 18 | Cosmo | 165 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 |
| Moderate | 13 | Jundee | 759 | 0.3 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 40 | 47 |
| Moderate | 14 | Monk | 7,037 | 3.0 | 0 | 14 | 100 | 0 | 0 | 0 | 57 | 36 | 7 | 416 | 440 |
| Moderate | 13 | Rainbow | 129 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 8 |
| Moderate | 7 | Violet | 139 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 9 |
| Moderate | 4 | Waguin | 6,716 | 2.9 | 0 | 10 | 100 | 0 | 0 | 0 | 80 | 0 | 20 | 403 | 420 |
| Moderate | 9 | Windarra | 46 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |
| Moderate | 13 | Woodline | 67,319 | 29.2 | 0 | 52 | 98 | 2 | 0 | 0 | 19 | 25 | 56 | 3,746 | 4,207 |
| Moderate | 14 | Yanganoo | 12,265 | 5.3 | 0 | 10 | 90 | 0 | 10 | 0 | 50 | 30 | 20 | 677 | 767 |
| Low | 12 | Kalli | 49,205 | 21.3 | 0 | 48 | 100 | 0 | 0 | 0 | 79 | 19 | 2 | 2,357 | 2,460 |
| Low | 1 | Naluthanna | 1,253 | 0.5 | 0 | 5 | 60 | 0 | 40 | 0 | 0 | 20 | 80 | 50 | 63 |
| Low | 1 | Norie | 1,616 | 0.7 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 65 | 81 |
| Low | 1 | Teutonic | 1,157 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 58 |
| Very low | 10 | Bullimore | 56,869 | 24.6 | 0 | 10 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 1,866 | 1,896 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) | Pcc (dse) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | (from table 2) | |
| Very high | 665 | 0.3 | 112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 133 |
| High | 2,224 | 1.0 | 0 | 6 | 83 | 0 | 17 | 0 | 17 | 0 | 83 | 197 | 318 |
| Moderately high | 15,738 | 6.8 | 0 | 18 | 100 | 0 | 0 | 0 | 83 | 6 | 11 | 1,220 | 1,312 |
| Moderate | 102,181 | 44.2 | 0 | 102 | 98 | 1 | 1 | 0 | 37 | 26 | 37 | 5,752 | 6,386 |
| Low | 53,231 | 23.1 | 0 | 54 | 96 | 0 | 4 | 0 | 70 | 19 | 11 | 2,518 | 2,662 |
| Very low | 56,869 | 24.6 | 0 | 10 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 1,866 | 1,896 |
| **Total** | 230,908 | 100.0 | 112 | 190 | 97 | 1 | 2 | 0 | 54 | 20 | 26 | 11,628 | 12,707 |
| **Survey average for land systems on this station** | | | | | 93 | 5 | 2 | ^0 | 39 | 33 | 28 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 112 (< 0.1% of station) |
| Number of traverse points | 190 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 97 |
| % minor | 1 |
| % moderate | 2 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 54 |
| % fair | 20 |
| % poor | 26 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 11,630 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 12,710 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# WOGARNO STATION

## PASTORAL LEASE 3114/1151

**Area:** About 61,817 ha (legal) 61,876 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Mt Magnet

**Shire(s):** Mt Magnet

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 265 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 389 | 0.6 |
| 4 | Breakaways and stony plains | 2 | 13,677 | 22.1 |
| 6 | Granite plains and rises | 1 | 5,825 | 9.4 |
| 8 | Chenopod plains and low rises | 1 | 4,104 | 6.6 |
| 12 | Acacia sandplains | 1 | 13,707 | 22.2 |
| 13 | Mulga hardpan plains | 2 | 23,512 | 38.0 |
| 16 | Sandy acacia plains with wanderrie | 1 | 663 | 1.1 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Mod. high | 8 | Gransal | 4,104 | 6.6 | 0 | 14 | 93 | 0 | 7 | 0 | 0 | 57 | 43 | 265 | 342 |
| Mod. high | 4 | Sherwood | 12,633 | 20.4 | 0 | 10 | 90 | 10 | 0 | 0 | 10 | 60 | 30 | 913 | 1,053 |
| Moderate | 6 | Challenge | 5,825 | 9.4 | 0 | 8 | 100 | 0 | 0 | 0 | 13 | 37 | 50 | 313 | 364 |
| Moderate | 13 | Jundee | 135 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 |
| Moderate | 4 | Waguin | 1,044 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 65 |
| Moderate | 13 | Woodline | 23,377 | 37.8 | 0 | 35 | 100 | 0 | 0 | 0 | 17 | 40 | 43 | 1,270 | 1,461 |
| Low | 1 | Bevon | 54 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |
| Low | 12 | Kalli | 13,707 | 22.2 | 0 | 13 | 100 | 0 | 0 | 0 | 31 | 31 | 38 | 591 | 685 |
| Low | 1 | Norie | 334 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 17 |
| Low | 16 | Yowie | 663 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 33 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Moderately high | 16,737 | 27.0 | 0 | 24 | 92 | 4 | 4 | 0 | 4 | 58 | 38 | 1,178 | 1,395 |
| Moderate | 30,380 | 49.1 | 0 | 43 | 100 | 0 | 0 | 0 | 16 | 40 | 44 | 1,653 | 1,899 |
| Low | 14,759 | 23.9 | 0 | 13 | 100 | 0 | 0 | 0 | 31 | 31 | 38 | 638 | 738 |
| **Total** | 61,876 | 100.0 | 0 | 80 | 98 | 1 | 1 | 0 | 15 | 44 | 41 | 3,469 | 4,032 |
| **Survey average for land systems on this station** | | | | | 97 | 2 | 1 | ^0 | 43 | 35 | 22 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 80 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 98 |
| % minor | 1 |
| % moderate | 1 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 15 |
| % fair | 44 |
| % poor | 41 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 3,470 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 4,030 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# WYDGEE STATION

## PASTORAL LEASE 3114/901

**Area:** About 170,241 ha (legal) 170,248 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Yalgoo

**Shire(s):** Yalgoo

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 485 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 5 | 8,513 | 5.0 |
| 4 | Breakaways and stony plains | 3 | 25,462 | 15.0 |
| 5 | Breakaways and chenopod plains | 1 | 2,081 | 1.2 |
| 6 | Granite plains and rises | 2 | 16,356 | 9.6 |
| 7 | Undulating acacia country | 1 | 1,407 | 0.8 |
| 8 | Chenopod plains and low rises | 2 | 13,039 | 7.7 |
| 10 | Spinifex sandplains | 1 | 12,411 | 7.3 |
| 11 | Sandplains with dense mixed shrublands | 1 | 8,292 | 4.9 |
| 12 | Acacia sandplains | 1 | 18,861 | 11.1 |
| 13 | Mulga hardpan plains | 3 | 50,052 | 29.4 |
| 14 | Mulga plains with some wanderrie | 1 | 529 | 0.3 |
| 16 | Sandy acacia plains with wanderrie | 1 | 11,586 | 6.8 |
| 17 | Chenopod alluvial plains | 2 | 938 | 0.6 |
| 18 | Calcreted old drainage systems | 1 | 721 | 0.4 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 17 | Ero | 241 | 0.1 | 38 | 3 | 33 | 0 | 33 | 34 | 0 | 33 | 67 | 16 | 34 |
| Mod. high | 18 | Cunyu | 721 | 0.4 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 44 | 60 |
| Mod. high | 8 | Gransal | 271 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 23 |
| Mod. high | 5 | Hootanui | 2,081 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 136 | 173 |
| Mod. high | 8 | Nallex | 12,768 | 7.5 | 49 | 23 | 83 | 13 | 4 | 0 | 4 | 61 | 35 | 844 | 1,064 |
| Mod. high | 4 | Sherwood | 20,574 | 12.1 | 0 | 22 | 95 | 5 | 0 | 0 | 41 | 41 | 18 | 1,511 | 1,715 |
| Mod. high | 17 | Skipper | 697 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 58 |
| Mod. high | 13 | Tindalarra | 13,869 | 8.1 | 0 | 34 | 97 | 0 | 3 | 0 | 6 | 59 | 35 | 923 | 1,156 |
| Moderate | 6 | Bandy | 1,033 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 65 |
| Moderate | 6 | Challenge | 15,322 | 9.0 | 0 | 19 | 95 | 5 | 0 | 0 | 16 | 52 | 32 | 841 | 958 |
| Moderate | 13 | Jundee | 2,545 | 1.5 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 67 | 33 | 137 | 159 |
| Moderate | 4 | Olympic | 647 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 40 |
| Moderate | 7 | Violet | 1,407 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 88 |
| Moderate | 4 | Waguin | 4,241 | 2.5 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 250 | 265 |
| Moderate | 13 | Woodline | 33,638 | 19.8 | 0 | 31 | 100 | 0 | 0 | 0 | 26 | 58 | 16 | 1,900 | 2,102 |
| Moderate | 14 | Yanganoo | 529 | 0.3 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 33 | 33 |
| Low | 11 | Bannar | 8,292 | 4.9 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 405 | 415 |
| Low | 1 | Bevon | 234 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 12 |
| Low | 1 | Gabanintha | 2,684 | 1.6 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 67 | 0 | 116 | 134 |
| Low | 12 | Kalli | 18,861 | 11.1 | 0 | 23 | 100 | 0 | 0 | 0 | 61 | 35 | 4 | 869 | 943 |
| Low | 1 | Naluthanna | 3,319 | 1.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 135 | 166 |
| Low | 1 | Norie | 1,579 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 79 |
| Low | 16 | Yowie | 11,586 | 6.8 | 0 | 13 | 100 | 0 | 0 | 0 | 62 | 15 | 23 | 535 | 579 |
| Very low | 1 | Brooking | 696 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 23 |
| Very low | 10 | Marmion | 12,207 | 7.2 | 0 | 7 | 100 | 0 | 0 | 0 | 86 | 14 | 0 | 399 | 407 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 241 | 0.1 | 38 | 3 | 34 | 0 | 33 | 33 | 0 | 33 | 67 | 16 | 34 |
| Moderately high | 50,982 | 29.9 | 49 | 80 | 92 | 5 | 3 | 0 | 16 | 54 | 30 | 3,535 | 4,248 |
| Moderate | 59,363 | 34.9 | 0 | 56 | 98 | 2 | 0 | 0 | 25 | 54 | 21 | 3,340 | 3,710 |
| Low | 46,555 | 27.4 | 0 | 40 | 100 | 0 | 0 | 0 | 60 | 30 | 10 | 2,144 | 2,328 |
| Very low | 13,107 | 7.7 | 0 | 7 | 100 | 0 | 0 | 0 | 86 | 14 | 0 | 421 | 430 |
| **Total** | 170,248 | 100.0 | 87 | 186 | 94 | 3 | 2 | 1 | 30 | 47 | 23 | 9,456 | 10,750 |
| **Survey average for land systems on this station** | | | | | 95 | 3 | 1 | ^0 | 41 | 34 | 25 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 87 (< 0.1% of station) |
| Number of traverse points | 186 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 94 |
| % minor | 3 |
| % moderate | 2 |
| % severe | 1 |
| Perennial vegetation | |
| % good | 30 |
| % fair | 47 |
| % poor | 23 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 9,460 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 10,750 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# YARRABUBBA STATION

## PASTORAL LEASE 3114/898

**Area:** About 116,511 ha (legal) 116,179 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Meekatharra

**Shire(s):** Meekatharra

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 285 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 6 | 1,454 | 1.3 |
| 4 | Breakaways and stony plains | 2 | 9,191 | 7.9 |
| 5 | Breakaways and chenopod plains | 1 | 348 | 0.3 |
| 6 | Granite plains and rises | 1 | 1,318 | 1.1 |
| 7 | Undulating acacia country | 1 | 393 | 0.3 |
| 8 | Chenopod plains and low rises | 2 | 560 | 0.5 |
| 9 | Stony non-chenopod plains | 3 | 6,290 | 5.4 |
| 10 | Spinifex sandplains | 1 | 4,323 | 3.7 |
| 12 | Acacia sandplains | 1 | 5,951 | 5.1 |
| 13 | Mulga hardpan plains | 4 | 11,771 | 10.1 |
| 14 | Mulga plains with some wanderrie | 1 | 48,649 | 41.9 |
| 17 | Chenopod alluvial plains | 1 | 1,148 | 1.0 |
| 18 | Calcreted old drainage systems | 3 | 10,571 | 9.1 |
| 20 | Lake country | 1 | 14,210 | 12.2 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 12,998 | 11.2 | 367 | 20 | 60 | 20 | 10 | 10 | 45 | 5 | 50 | 1,284 | 1,857 |
| High | 17 | Ero | 1,148 | 1.0 | 95 | 2 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 117 | 164 |
| High | 5 | Gumbreak | 348 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 50 |
| High | 18 | Mileura | 5,395 | 4.6 | 0 | 8 | 25 | 50 | 25 | 0 | 13 | 0 | 87 | 552 | 771 |
| Mod. high | 18 | Cunyu | 3,434 | 3.0 | 0 | 5 | 80 | 20 | 0 | 0 | 0 | 20 | 80 | 212 | 286 |
| Mod. high | 8 | Gransal | 356 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 30 |
| Mod. high | 8 | Nallex | 205 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 17 |
| Mod. high | 4 | Sherwood | 9,002 | 7.7 | 324 | 10 | 80 | 20 | 0 | 0 | 30 | 10 | 60 | 571 | 750 |
| Mod. high | 1 | Wiluna | 134 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 11 |
| Moderate | 6 | Challenge | 1,318 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 82 |
| Moderate | 9 | Felix | 376 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 24 |
| Moderate | 13 | Hamilton | 807 | 0.7 | 0 | 3 | 67 | 0 | 33 | 0 | 33 | 33 | 34 | 45 | 50 |
| Moderate | 18 | Melaleuca | 1,742 | 1.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 109 |
| Moderate | 13 | Rainbow | 3,830 | 3.3 | 0 | 5 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 213 | 239 |
| Moderate | 13 | Ranch | 1,893 | 1.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 | 118 |
| Moderate | 7 | Violet | 393 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 25 |
| Moderate | 4 | Waguin | 189 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 12 |
| Moderate | 9 | Windarra | 5,646 | 4.9 | 0 | 9 | 89 | 0 | 0 | 11 | 0 | 22 | 78 | 289 | 353 |
| Moderate | 13 | Woodline | 5,242 | 4.5 | 0 | 10 | 90 | 10 | 0 | 0 | 0 | 20 | 80 | 268 | 328 |
| Moderate | 14 | Yanganoo | 48,649 | 41.9 | 303 | 91 | 82 | 16 | 2 | 0 | 13 | 31 | 56 | 2,580 | 3,041 |
| Low | 1 | Bevon | 226 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 11 |
| Low | 1 | Gabanintha | 3 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Low | 12 | Kalli | 5,951 | 5.1 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 279 | 298 |
| Low | 1 | Naluthanna | 75 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 |
| Low | 1 | Norie | 672 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 34 |
| Low | 9 | Yarrameedie | 269 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 13 |
| Very low | 1 | Brooking | 344 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 11 |
| Very low | 10 | Bullimore | 4,323 | 3.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 142 | 144 |
| Nil | 20 | Lake bed | 1,212 | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 19,889 | 17.1 | 462 | 30 | 53 | 27 | 13 | 7 | 33 | 7 | 60 | 1,988 | 2,841 |
| Moderately high | 13,130 | 11.3 | 324 | 15 | 80 | 20 | 0 | 0 | 20 | 13 | 67 | 830 | 1,094 |
| Moderate | 70,084 | 60.3 | 303 | 118 | 82 | 14 | 3 | 1 | 11 | 32 | 57 | 3,723 | 4,380 |
| Low | 7,197 | 6.2 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 334 | 360 |
| Very low | 4,667 | 4.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 153 | 156 |
| Nil | 1,212 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 116,179 | 100.0 | 1,089 | 166 | 78 | 16 | 4 | 2 | 16 | 25 | 59 | 7,028 | 8,831 |
| **Survey average for land systems on this station** | | | | | 93 | 5 | 1 | ^0 | 41 | 32 | 27 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 1089 (0.9% of station) |
| Number of traverse points | 166 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 78 |
| % minor | 16 |
| % moderate | 25 |
| % severe | 59 |
| Perennial vegetation | |
| % good | 16 |
| % fair | 25 |
| % poor | 59 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 7,030 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 8,830 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# YEELIRRIE STATION

## PASTORAL LEASE 3114/620

**Area:** About 244,552 ha (legal) 246,087 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Leonora, Sandstone, Wiluna

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 59 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 2 | 6,386 | 2.6 |
| 4 | Breakaways and stony plains | 2 | 29,145 | 11.8 |
| 6 | Granite plains and rises | 2 | 1,442 | 0.6 |
| 8 | Chenopod plains and low rises | 1 | 224 | 0.1 |
| 9 | Stony non-chenopod plains | 1 | 2,111 | 0.9 |
| 10 | Spinifex sandplains | 1 | 123,701 | 50.3 |
| 12 | Acacia sandplains | 1 | 2,522 | 1.0 |
| 13 | Mulga hardpan plains | 1 | 3,358 | 1.4 |
| 14 | Mulga plains with some wanderrie | 2 | 56,959 | 23.1 |
| 16 | Sandy acacia plains with wanderrie | 1 | 3,067 | 1.2 |
| 17 | Chenopod alluvial plains | 1 | 1,033 | 0.4 |
| 18 | Calcreted old drainage systems | 4 | 13,200 | 5.4 |
| 20 | Lake country | 1 | 2,939 | 1.2 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 2,939 | 1.2 | 0 | 6 | 83 | 17 | 0 | 0 | 50 | 50 | 0 | 357 | 420 |
| High | 18 | Mileura | 4,514 | 1.8 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 67 | 33 | 462 | 645 |
| High | 17 | Roderick | 1,033 | 0.4 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 75 | 25 | 94 | 148 |
| Mod. high | 18 | Cunyu | 2,441 | 1.0 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 67 | 0 | 151 | 203 |
| Mod. high | 8 | Gransal | 224 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 19 |
| Mod. high | 4 | Sherwood | 27,509 | 11.2 | 105 | 37 | 92 | 5 | 3 | 0 | 76 | 16 | 8 | 2,173 | 2,292 |
| Moderate | 6 | Bandy | 148 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 |
| Moderate | 6 | Challenge | 1,294 | 0.5 | 0 | 4 | 100 | 0 | 0 | 0 | 25 | 75 | 0 | 74 | 81 |
| Moderate | 18 | Cosmo | 1,399 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 82 | 87 |
| Moderate | 16 | Desdemona | 3,067 | 1.2 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 185 | 192 |
| Moderate | 13 | Hamilton | 3,358 | 1.4 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 0 | 33 | 186 | 210 |
| Moderate | 18 | Melaleuca | 4,846 | 2.0 | 0 | 5 | 100 | 0 | 0 | 0 | 60 | 20 | 20 | 284 | 303 |
| Moderate | 14 | Monk | 19,313 | 7.8 | 19 | 30 | 97 | 0 | 0 | 3 | 30 | 50 | 20 | 1,091 | 1,207 |
| Moderate | 4 | Waguin | 1,636 | 0.7 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 96 | 102 |
| Moderate | 9 | Windarra | 2,111 | 0.9 | 0 | 4 | 100 | 0 | 0 | 0 | 25 | 25 | 50 | 115 | 132 |
| Moderate | 14 | Yanganoo | 37,646 | 15.3 | 0 | 57 | 98 | 0 | 2 | 0 | 28 | 40 | 32 | 2,098 | 2,353 |
| Low | 12 | Kalli | 2,522 | 1.0 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 126 | 126 |
| Low | 1 | Norie | 4,223 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 195 | 211 |
| Very low | 10 | Bullimore | 123,701 | 50.3 | 0 | 118 | 100 | 0 | 0 | 0 | 96 | 1 | 3 | 4,100 | 4,123 |
| Very low | 1 | Wyarri | 2,163 | 0.9 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 33 | 34 | 64 | 72 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 8,486 | 3.4 | 0 | 13 | 92 | 8 | 0 | 0 | 23 | 62 | 15 | 912 | 1,212 |
| Moderately high | 30,174 | 12.3 | 105 | 40 | 92 | 5 | 3 | 0 | 72 | 20 | 8 | 2,339 | 2,515 |
| Moderate | 74,818 | 30.4 | 19 | 107 | 98 | 0 | 1 | 1 | 32 | 42 | 26 | 4,220 | 4,676 |
| Low | 6,745 | 2.7 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 321 | 337 |
| Very low | 125,864 | 51.2 | 0 | 121 | 100 | 0 | 0 | 0 | 94 | 2 | 4 | 4,164 | 4,195 |
| **Total** | 246,087 | 100.0 | 124 | 285 | 98 | 1 | 1 | ^0 | 65 | 22 | 13 | 11,956 | 12,935 |
| **Survey average for land systems on this station** | | | | | 94 | 4 | 1 | ^0 | 46 | 29 | 25 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 124 (< 0.1% of station) |
| Number of traverse points | 285 (includes 167 points from the NE Goldfields rangeland survey) |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 98 |
| % minor | 1 |
| % moderate | 1 |
| % severe | ^0 |
| Perennial vegetation | |
| % good | 65 |
| % fair | 22 |
| % poor | 13 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 11,960 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 12,940 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# YOUANMI DOWNS STATION

## PASTORAL LEASE 3114/1175

**Area:** About 257,249 ha (legal) 257,366 ha (computed)
**Area surveyed:** Whole station
**Land Conservation District:** Sandstone
**Shire(s):** Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 6,713 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 6 | 9,291 | 3.6 |
| 4 | Breakaways and stony plains | 3 | 20,775 | 8.1 |
| 5 | Breakaways and chenopod plains | 2 | 2,004 | 0.8 |
| 6 | Granite plains and rises | 2 | 5,181 | 2.0 |
| 7 | Undulating acacia country | 2 | 9,396 | 3.7 |
| 8 | Chenopod plains and low rises | 2 | 3,563 | 1.4 |
| 9 | Stony non-chenopod plains | 2 | 1,882 | 0.7 |
| 10 | Spinifex sandplains | 2 | 89,074 | 34.6 |
| 12 | Acacia sandplains | 1 | 16,137 | 6.3 |
| 13 | Mulga hardpan plains | 3 | 31,063 | 12.1 |
| 14 | Mulga plains with some wanderrie | 2 | 3,116 | 1.2 |
| 15 | Chenopod washplains | 1 | 133 | 0.1 |
| 16 | Sandy acacia plains with wanderrie | 2 | 65,411 | 25.4 |
| 18 | Calcreted old drainage systems | 1 | 341 | 0.1 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 5 | Gumbreak | 913 | 0.4 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 74 | 130 |
| Mod. high | 4 | Euchre | 1,896 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 150 | 158 |
| Mod. high | 8 | Gransal | 2,176 | 0.8 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 150 | 181 |
| Mod. high | 5 | Hootanui | 1,091 | 0.4 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 69 | 91 |
| Mod. high | 15 | Monitor | 133 | 0.1 | 103 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 2 | 11 |
| Mod. high | 8 | Nallex | 1,387 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 116 |
| Mod. high | 7 | Nubev | 501 | 0.2 | 0 | 2 | 50 | 50 | 0 | 0 | 0 | 0 | 100 | 28 | 42 |
| Mod. high | 4 | Sherwood | 6,225 | 2.4 | 0 | 7 | 100 | 0 | 0 | 0 | 71 | 29 | 0 | 497 | 519 |
| Mod. high | 1 | Wiluna | 3,179 | 1.2 | 0 | 5 | 100 | 0 | 0 | 0 | 0 | 40 | 60 | 197 | 265 |
| Moderate | 6 | Bandy | 1,493 | 0.6 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 93 | 93 |
| Moderate | 6 | Challenge | 3,688 | 1.4 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 25 | 75 | 190 | 231 |
| Moderate | 9 | Felix | 113 | ^0.0 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 6 | 7 |
| Moderate | 13 | Jundee | 1,303 | 0.5 | 74 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 74 | 81 |
| Moderate | 18 | Melaleuca | 341 | 0.1 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 17 | 21 |
| Moderate | 14 | Monk | 878 | 0.3 | 0 | 3 | 100 | 0 | 0 | 0 | 67 | 33 | 0 | 53 | 55 |
| Moderate | 13 | Rainbow | 13,558 | 5.3 | 0 | 20 | 100 | 0 | 0 | 0 | 15 | 40 | 45 | 733 | 847 |
| Moderate | 7 | Violet | 8,895 | 3.5 | 0 | 10 | 100 | 0 | 0 | 0 | 30 | 20 | 50 | 488 | 556 |
| Moderate | 4 | Waguin | 12,653 | 4.9 | 0 | 14 | 100 | 0 | 0 | 0 | 86 | 14 | 0 | 779 | 791 |
| Moderate | 9 | Windarra | 1,770 | 0.7 | 0 | 3 | 67 | 0 | 0 | 33 | 33 | 0 | 67 | 96 | 111 |
| Moderate | 13 | Woodline | 16,203 | 6.3 | 0 | 14 | 100 | 0 | 0 | 0 | 0 | 29 | 71 | 902 | 1,013 |
| Moderate | 14 | Yanganoo | 2,238 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 140 |
| Low | 1 | Bevon | 2,346 | 0.9 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 33 | 34 | 102 | 117 |
| Low | 1 | Gabanintha | 1,425 | 0.6 | 0 | 3 | 100 | 0 | 0 | 0 | 0 | 33 | 67 | 57 | 71 |
| Low | 12 | Kalli | 16,137 | 6.3 | 0 | 19 | 100 | 0 | 0 | 0 | 68 | 32 | 0 | 755 | 807 |
| Low | 1 | Naluthanna | 717 | 0.3 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 29 | 36 |
| Low | 1 | Norie | 654 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 33 |
| Low | 16 | Tealtoo | 832 | 0.3 | 0 | 4 | 100 | 0 | 0 | 0 | 50 | 0 | 50 | 37 | 42 |
| Low | 1 | Teutonic | 969 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 48 |
| Low | 16 | Yowie | 64,579 | 25.1 | 0 | 60 | 100 | 0 | 0 | 0 | 48 | 32 | 20 | 2,893 | 3,229 |
| Very low | 10 | Marmion | 86,041 | 33.4 | 0 | 17 | 100 | 0 | 0 | 0 | 82 | 12 | 6 | 2,802 | 2,868 |
| Very low | 10 | Tyrrell | 3,033 | 1.2 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 98 | 101 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 913 | 0.3 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 74 | 130 |
| Moderately high | 16,588 | 6.5 | 103 | 21 | 95 | 5 | 0 | 0 | 24 | 28 | 48 | 1,182 | 1,382 |
| Moderate | 63,131 | 24.5 | 0 | 73 | 99 | 0 | 0 | 1 | 32 | 25 | 43 | 3,553 | 3,946 |
| Low | 87,660 | 34.1 | 74 | 91 | 100 | 0 | 0 | 0 | 49 | 31 | 20 | 3,942 | 4,383 |
| Very low | 89,074 | 34.6 | 0 | 19 | 100 | 0 | 0 | 0 | 84 | 11 | 5 | 2,901 | 2,969 |
| **Total** | 257,366 | 100.0 | 177 | 208 | 99 | ^0 | 0 | ^0 | 43 | 27 | 30 | 11,652 | 12,810 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 42 | 33 | 25 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 177 (< 0.1% of station) |
| Number of traverse points | 208 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 99 |
| % minor | ^0 |
| % moderate | 0 |
| % severe | ^0 |
| Perennial vegetation | |
| % good | 43 |
| % fair | 27 |
| % poor | 30 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 11,650 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 12,810 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# YOUNO DOWNS STATION (PART ONLY)

## PASTORAL LEASE 3114/1177

**Area:** About 162,450 ha (legal)

**Area surveyed:** 49,386 ha (about 30% of station)

**Land Conservation District:** Sandstone

**Shire(s):** Wiluna

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 68 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 4 | 5,468 | 11.1 |
| 4 | Breakaways and stony plains | 2 | 3,400 | 6.9 |
| 6 | Granite plains and rises | 1 | 397 | 0.8 |
| 7 | Undulating acacia country | 2 | 4,058 | 8.2 |
| 9 | Stony non-chenopod plains | 2 | 4,599 | 9.3 |
| 10 | Spinifex sandplains | 1 | 14,236 | 28.8 |
| 12 | Acacia sandplains | 1 | 453 | 0.9 |
| 13 | Mulga hardpan plains | 2 | 5,957 | 12.1 |
| 14 | Mulga plains with some wanderrie | 1 | 8,546 | 17.3 |
| 15 | Chenopod washplains | 1 | 127 | 0.3 |
| 16 | Sandy acacia plains with wanderrie | 1 | 1,058 | 2.1 |
| 17 | Chenopod alluvial plains | 1 | 1,086 | 2.2 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Mod. high | 15 | Monitor | 127 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 11 |
| Mod. high | 7 | Nubev | 920 | 1.9 | 0 | 3 | 100 | 0 | 0 | 0 | 33 | 0 | 67 | 60 | 77 |
| Mod. high | 4 | Sherwood | 2,819 | 5.7 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 204 | 235 |
| Mod. high | 17 | Wilson | 1,086 | 2.2 | 557 | 5 | 100 | 0 | 0 | 0 | 0 | 40 | 60 | 73 | 91 |
| Moderate | 16 | Ararak | 1,058 | 2.1 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 66 | 66 |
| Moderate | 6 | Challenge | 397 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 25 |
| Moderate | 9 | Felix | 2,468 | 5.0 | 0 | 6 | 100 | 0 | 0 | 0 | 50 | 17 | 33 | 141 | 154 |
| Moderate | 13 | Jundee | 5,352 | 10.8 | 0 | 7 | 100 | 0 | 0 | 0 | 71 | 29 | 0 | 324 | 335 |
| Moderate | 7 | Violet | 3,138 | 6.4 | 0 | 9 | 100 | 0 | 0 | 0 | 33 | 11 | 56 | 172 | 196 |
| Moderate | 4 | Waguin | 581 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 36 |
| Moderate | 13 | Yalluwin | 605 | 1.2 | 60 | 1 | 0 | 100 | 0 | 0 | 0 | 0 | 100 | 27 | 38 |
| Moderate | 14 | Yanganoo | 8,546 | 17.3 | 0 | 9 | 89 | 11 | 0 | 0 | 78 | 11 | 11 | 472 | 534 |
| Low | 1 | Bevon | 4,508 | 9.1 | 0 | 2 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 225 | 225 |
| Low | 1 | Gabanintha | 350 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 18 |
| Low | 12 | Kalli | 453 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 23 |
| Low | 1 | Teutonic | 8 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Low | 9 | Yarrameedi | 2,131 | 4.3 | 0 | 5 | 100 | 0 | 0 | 0 | 0 | 80 | 20 | 91 | 107 |
| Very low | 1 | Brooking | 602 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 20 |
| Very low | 10 | Bullimore | 14,236 | 28.8 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 475 | 475 |

## Table 3. Pastoral resource summary

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| Moderately high | 4,952 | 10.0 | 557 | 10 | 80 | 0 | 10 | 10 | 30 | 20 | 50 | 343 | 413 |
| Moderate | 22,146 | 44.8 | 60 | 33 | 91 | 9 | 0 | 0 | 58 | 15 | 27 | 1,258 | 1,384 |
| Low | 7,450 | 15.1 | 0 | 7 | 100 | 0 | 0 | 0 | 29 | 57 | 14 | 352 | 373 |
| Very low | 14,838 | 30.1 | 0 | 4 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 494 | 495 |
| **Total** | 49,386 | 100.0 | 617 | 54 | 90 | 6 | 2 | 2 | 52 | 20 | 28 | 2,447 | 2,665 |
| **Survey average for land systems on this station** | | | | | 95 | 3 | 1 | 1 | 46 | 29 | 25 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary (part only)

| | |
|---|---|
| Severely degraded and eroded (ha) | 617 |
| Number of traverse points | 54 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 90 |
| % minor | 6 |
| % moderate | 2 |
| % severe | 2 |
| Perennial vegetation | |
| % good | 52 |
| % fair | 20 |
| % poor | 28 |
| ¦ Suggested carrying capacity (dse) over summer, following an effective winter season | 2,450 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 2,660 |

¦ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# YOWERAGABBIE STATION

## PASTORAL LEASE 3114/516

**Area:** About 106,411 ha (legal) 106,663 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Mt Magnet

**Shire(s):** Mt Magnet

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 659 ha.

**Table 1. Summary of land types**

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 4 | 4,467 | 4.2 |
| 4 | Breakaways and stony plains | 2 | 9,177 | 8.6 |
| 6 | Granite plains and rises | 1 | 11,803 | 11.1 |
| 7 | Undulating acacia country | 1 | 30 | ^0.0 |
| 8 | Chenopod plains and low rises | 1 | 2,710 | 2.5 |
| 12 | Acacia sandplains | 1 | 10,285 | 9.6 |
| 13 | Mulga hardpan plains | 4 | 55,477 | 52.0 |
| 17 | Chenopod alluvial plains | 1 | 2,051 | 1.9 |
| 18 | Calcreted old drainage systems | 1 | 7,512 | 7.0 |
| 20 | Lakecountry | 1 | 3,150 | 3.0 |

**Table 2. Rangeland inventory and condition summary**

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | Scc* (dse) | Pcc** (dse) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | | |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 3,150 | 3.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 386 | 450 |
| High | 17 | Ero | 2,051 | 1.9 | 0 | 14 | 36 | 50 | 14 | 0 | 21 | 50 | 29 | 201 | 293 |
| High | 18 | Mileura | 7,512 | 7.0 | 0 | 25 | 96 | 0 | 4 | 0 | 32 | 48 | 20 | 798 | 1,073 |
| Mod. high | 8 | Gransal | 2,710 | 2.5 | 0 | 7 | 86 | 14 | 0 | 0 | 14 | 72 | 10 | 192 | 226 |
| Mod. high | 4 | Sherwood | 9,174 | 8.6 | 0 | 11 | 9 | 19 | 0 | 0 | 46 | 36 | 18 | 679 | 765 |
| Mod. high | 1 | Wiluna | 425 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 35 |
| Moderate | 6 | Challenge | 11,803 | 11.1 | 0 | 16 | 88 | 12 | 0 | 0 | 25 | 69 | 6 | 672 | 738 |
| Moderate | 13 | Hamilton | 2,167 | 2.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 135 |
| Moderate | 13 | Jundee | 335 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 21 |
| Moderate | 7 | Violet | 30 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Moderate | 4 | Waguin | 3 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Moderate | 13 | Woodline | 52,107 | 48.9 | 0 | 73 | 100 | 0 | 0 | 0 | 40 | 52 | 8 | 3,016 | 3,257 |
| Moderate | 13 | Yalluwin | 868 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 54 |
| Low | 1 | Bevon | 191 | 0.2 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 8 | 10 |
| Low | 1 | Gabanintha | 2,291 | 2.1 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 50 | 50 | 92 | 115 |
| Low | 12 | Kalli | 10,285 | 9.6 | 0 | 10 | 100 | 0 | 0 | 0 | 80 | 20 | 0 | 494 | 514 |
| Low | 1 | Norie | 1,561 | 1.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 78 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 12,713 | 11.9 | 0 | 39 | 74 | 18 | 8 | 0 | 28 | 49 | 23 | 1,385 | 1,816 |
| Moderately high | 12,309 | 11.6 | 0 | 18 | 89 | 11 | 0 | 0 | 33 | 50 | 17 | 900 | 1,026 |
| Moderate | 67,314 | 63.1 | 0 | 89 | 98 | 2 | 0 | 0 | 37 | 55 | 8 | 3,878 | 4,207 |
| Low | 14,327 | 13.4 | 0 | 13 | 100 | 0 | 0 | 0 | 61 | 31 | 8 | 665 | 716 |
| **Total** | 106,663 | 100.0 | 0 | 159 | 91 | 7 | 2 | 0 | 36 | 51 | 13 | 6,828 | 7,765 |
| **Survey average for land systems on this station** | | | | | 93 | 5 | 2 | ^0 | 42 | 34 | 24 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 0 (0.0% of station) |
| Number of traverse points | 159 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 91 |
| % minor | 7 |
| % moderate | 2 |
| % severe | 0 |
| Perennial vegetation | |
| % good | 36 |
| % fair | 51 |
| % poor | 13 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 6,830 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 7,760 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# YUINMERY STATION

## PASTORAL LEASE 3114/1039

**Area:** About 124,925 ha (legal) 125,073 ha (computed)

**Area surveyed:** Whole station

**Land Conservation District:** Sandstone

**Shire(s):** Sandstone

Approximate area of various reserves, freehold and Vacant Crown Land within the pastoral lease = 54 ha.

### Table 1. Summary of land types

| No. | Land type | No. of land systems | Area (ha) | (% of station) |
|---|---|---|---|---|
| 1 | Acacia hills | 1 | 10 | ^0.0 |
| 4 | Breakaways and stony plains | 2 | 5,985 | 4.8 |
| 5 | Breakaways and chenopod plains | 1 | 2,005 | 1.6 |
| 6 | Granite plains and rises | 2 | 4,532 | 3.6 |
| 7 | Undulating acacia country | 1 | 187 | 0.1 |
| 8 | Chenopod plains and low rises | 1 | 7,101 | 5.7 |
| 9 | Stony non-chenopod plains | 1 | 599 | 0.5 |
| 10 | *Spinifex sandplains* | 2 | 42,837 | 34.2 |
| 12 | Acacia sandplains | 1 | 5,837 | 4.7 |
| 13 | Mulga hardpan plains | 2 | 1,719 | 1.4 |
| 14 | Mulga plains with some wanderrie | 2 | 12,470 | 10.0 |
| 15 | Chenopod washplains | 1 | 660 | 0.5 |
| 16 | Sandy acacia plains with wanderrie | 1 | 2,662 | 2.1 |
| 18 | Calcreted old drainage systems | 2 | 4,908 | 3.9 |
| 19 | Plains with eucalypt woodlands | 1 | 329 | 0.3 |
| 20 | Lake country | 1 | 33,232 | 26.6 |

### Table 2. Rangeland inventory and condition summary

| Pastoral potential | Land type | Land system | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | | Sde~ | No. of traverse points# | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc* (dse) | Pcc** (dse) |
| | | | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 20 | Carnegie | 29,335 | 23.5 | 0 | 10 | 90 | 10 | 0 | 0 | 50 | 40 | 10 | 3,592 | 4,191 |
| High | 5 | Gumbreak | 2,005 | 1.6 | 0 | 4 | 75 | 25 | 0 | 0 | 0 | 25 | 75 | 144 | 286 |
| Mod. high | 18 | Cunyu | 4,268 | 3.4 | 52 | 19 | 89 | 0 | 0 | 11 | 5 | 11 | 84 | 248 | 356 |
| Mod. high | 19 | Doney | 329 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 27 |
| Mod. high | 8 | Gransal | 7,101 | 5.7 | 0 | 21 | 81 | 19 | 0 | 0 | 48 | 24 | 28 | 516 | 592 |
| Mod. high | 15 | Monitor | 660 | 0.5 | 200 | 2 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 26 | 55 |
| Mod. high | 4 | Sherwood | 5,462 | 4.4 | 0 | 13 | 100 | 0 | 0 | 0 | 31 | 46 | 23 | 390 | 455 |
| Moderate | 6 | Bandy | 289 | 0.2 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 16 | 18 |
| Moderate | 6 | Challenge | 4,243 | 3.4 | 0 | 4 | 75 | 0 | 25 | 0 | 25 | 50 | 25 | 237 | 265 |
| Moderate | 18 | Melaleuca | 640 | 0.5 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 100 | 0 | 36 | 40 |
| Moderate | 14 | Monk | 4,302 | 3.4 | 0 | 13 | 92 | 0 | 0 | 8 | 31 | 54 | 15 | 245 | 269 |
| Moderate | 13 | Rainbow | 194 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 12 |
| Moderate | 7 | Violet | 187 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 12 |
| Moderate | 4 | Waguin | 523 | 0.4 | 0 | 2 | 100 | 0 | 0 | 0 | 50 | 0 | 50 | 29 | 33 |
| Moderate | 9 | Windarra | 599 | 0.5 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 30 | 37 |
| Moderate | 13 | Woodline | 1,525 | 1.2 | 0 | 2 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 76 | 95 |
| Moderate | 14 | Yanganoo | 8,169 | 6.5 | 0 | 35 | 100 | 0 | 0 | 0 | 31 | 29 | 40 | 453 | 511 |
| Low | 1 | Gabanintha | 10 | ^0.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Low | 12 | Kalli | 5,837 | 4.7 | 0 | 4 | 100 | 0 | 0 | 0 | 0 | 75 | 25 | 233 | 292 |
| Low | 16 | Yowie | 2,662 | 2.1 | 0 | 1 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 120 | 133 |
| Very low | 10 | Marmion | 17,317 | 13.8 | 0 | 1 | 100 | 0 | 0 | 0 | 100 | 0 | 0 | 564 | 577 |
| Very low | 10 | Tyrrell | 25,520 | 20.4 | 0 | 34 | 100 | 0 | 0 | 0 | 41 | 53 | 6 | 779 | 851 |
| Nil | 20 | Lake bed | 3,897 | 3.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 3. Pastoral resource summary**

| Pastoral potential | Area | | | Traverse assessment of resource condition | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Sde | No. of traverse points | Soil erosion (%) | | | | Perennial vegetation (%) | | | Scc (dse) (from table 2) | Pcc (dse) (from table 2) |
| | ha | % | ha | | Nil | Minor | Mod. | Severe | Good | Fair | Poor | | |
| High | 31,340 | 25.1 | 0 | 14 | 86 | 14 | 0 | 0 | 36 | 36 | 28 | 3,736 | 4,477 |
| Moderately high | 17,820 | 14.2 | 252 | 55 | 89 | 7 | 0 | 4 | 27 | 24 | 49 | 1,205 | 1,485 |
| Moderate | 20,671 | 16.5 | 0 | 61 | 96 | 0 | 2 | 2 | 28 | 36 | 36 | 1,144 | 1,292 |
| Low | 8,508 | 6.8 | 0 | 5 | 100 | 0 | 0 | 0 | 0 | 60 | 40 | 353 | 425 |
| Very low | 42,847 | 34.3 | 0 | 35 | 100 | 0 | 0 | 0 | 43 | 51 | 6 | 1,343 | 1,428 |
| Nil | 3,897 | 3.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | 125,073 | 100.0 | 252 | 170 | 93 | 4 | 1 | 2 | 31 | 35 | 34 | 7,781 | 9,107 |
| **Survey average for land systems on this station** | | | | | 96 | 3 | 1 | ^0 | 43 | 33 | 24 | | |

^ Indicates minor value not reported in tables.

~ Area mapped as being severely degraded and eroded.

# Where there are no traverse observations for a land system the carrying capacity calculations are based on averages for the system over the whole survey area.

* Suggested carrying capacity (dry sheep equivalents) over summer, following an effective winter season.

** Potential carrying capacity (dry sheep equivalents) over summer, assuming all land systems are in good condition.

### Station summary

| | |
|---|---|
| Severely degraded and eroded (ha) | 252 (0.2% of station) |
| Number of traverse points | 170 |
| Pastoral resource condition: | |
| Soil erosion | |
| % nil | 93 |
| % minor | 4 |
| % moderate | 1 |
| % severe | 2 |
| Perennial vegetation | |
| % good | 31 |
| % fair | 35 |
| % poor | 34 |
| ǂ Suggested carrying capacity (dse) over summer, following an effective winter season | 7,780 |
| Potential carrying capacity (dse) over summer, assuming all land systems are in good condition | 9,110 |

ǂ The suggested carrying capacity (scc) over summer assumes that the entire station is adequately developed for the effective management of livestock, and that the most common seasonal conditions of a fair winter preceding a poor summer prevail. On an annual basis the scc may be considerably higher or lower than the quoted figure depending on the seasonal conditions. The scc therefore represents a reasonable approximation of the long term sustainable carrying capacity. It is a guideline figure, there is no requirement for it to be rigidly applied by managers nor is it appropriate for it to be used alone as a basis for commercial or regulatory purposes as there will be other factors which should also be taken into account.

# Acknowledgements

We would like to thank all pastoralists in the survey area for their involvement in this project, with particular thanks to members of the Yalgoo, Mt Magnet and Sandstone Land Conservation District Committees.

We acknowledge the work done by the other members of the rangeland survey team at the time of the survey; Alan Payne, Hugh Pringle, Peter Hennig, Mark Newell and David Blood from Agriculture Western Australia, and Ken Leighton and Jon Holmes from the Department of Land Administration. We are particularly grateful to Alan MacDonagh who prepared and improved the station plans. Assistance from Roderick O'Connor was gratefully appreciated.

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