

Factsheet

Grazing management principles: No.2

Control access to watering points Water is a crucial factor for both production and biodiversity in the Western Local Region.

The varying landscapes across the Western Local Region influence both water availability and the land manager's ability to control it.

There is considerable variation in water sources across landscapes, as well as water availability during different seasons and climatic cycles. All livestock operations require natural or constructed water infrastructure with the locations often dictated by the landscape, past management practices and historical grazing enterprises.

The location and accessibility of watering points, continuity of supply and water quality can influence the use of pastures, herd productivity, non-domestic animal grazing pressure and land condition.

The availability of water influences the area that stock and other animals will graze. For instance, grazing will be heaviest close to watering points and will gradually lighten as the distance from water increases.

Figure 1: The diagram below shows how the composition of native plant and animal species changes with distance from an artificial source of water.



(Image: http://savanna.cdu.edu.au/downloads/biograze.pdf)

Pasture species which are sensitive to grazing (decreaser species) will be more abundant in areas further away from watering points, while those that can tolerate heavier grazing (increaser species) will tend to be dominant around watering points.

Studies have shown that decreaser pasture species are dominant in areas that are typically up to 6 km away from water where sheep are grazed, and up to 9 km away for cattle, depending on the type of country.

Some key species

Individual pasture species will react differently to the grazing pressures associated with watering point location.

Decreaser pasture species that may decline in abundance with inappropriate grazing management include:

- Curly windmill grass
 - Curly Mitchell grass
- Mulga Mitchell grass
- Bandicoot grass
- Common bottlewashers Enneapogon avenaceous
- Woollybutt grass
- Neverfail grass

•

Some key increaser species that are more common in heavily grazed areas are:

- Variable speargrass
- No 9 wiregrass
- Barley grass
- Goathead burr
- Ward's weed
- Button grass
- Austrostipa scabra

Enteropogon acicularis

Thyridolepis mitchelliana

Monochather paradoxa

Astrebla lappacea

Eragrostis eriopoda

Eragrostis setifolia.

- Aristida jerichoensis
- Hordeum leporinum Sclerolaena bicornis
- Carrichtera annua
- Dactyloctenium radulans.

Australian Government

Figure 2: An example of a watering point.



Resource benefits of controlling access to watering points

Grazing pressure

The location of and distance between watering points will greatly influence stock movement and grazing patterns. Pasture composition and groundcover can be maintained in good condition through careful management of watering point location and use.

Feral animal control

Watering points can be used as a management tool to trap feral (and domestic) animals and to control their movements around and between paddocks.

Establishing motion activated cameras at watering points provides evidence of feral animal activity allowing landholders to tailor control methods.

Biodiversity

Natural sources of water are important habitat areas for wildlife and aquatic animals such as native fish. Residents of these habitats benefit from watering point management through the retention of cover, availability of food sources and maintenance of water quality. These biodiversity benefits flow-on to the wider landscape.

Stock health and water quality

- Quality of available water will influence the ability of stock to gain weight.
- Prolonged dry periods or droughts can influence the salinity of bore water.
- Water quality should be tested to ensure it is a suitable standard for stock.
- Monitoring is important when feeding stock supplements or fodder, as water quality can influence the intake of supplements.

Conserving decreaser pasture species

- Pasture species that do not tolerate grazing will mainly be found in areas far from watering points.
- While increasing the number of watering points is desirable in terms of evenness of grazing pressure, the persistence of decreaser pasture species can decline as a result.
- To overcome this, land managers can fence off areas to be lightly grazed, or maintain some areas as water-remote.

Riparian areas

- Riparian areas are those adjacent and close to creeks or rivers but may also include areas around ground tanks.
- Both domestic and pest animals can have a degrading effect on riparian areas and water quality by trampling vegetation, compacting soil, making pads, stirring up mud and defecating in the water.
- Fencing of riparian areas allows the land manager to control the impacts on these areas. Fencing out may require the installation of additional watering points in paddocks for stock use. Poly tanks and troughs can be used but should be located on stable soil areas and away from fences and paddock corners.

Planning for water-remote conservation areas

Well planned properties can assist in the protection of decreaser species across the landscape.

In the diagram below, the filled circles represent current watering points, while the open circles are potential watering sites. The coloured areas represent waterremote vegetation that will be protected from excessive grazing.

A property or landscape planned in this way will retain 10% of the total area as 'water-remote' or areas where grazing is unlikely to occur so that sensitive decreaser pasture species and habitats are protected.

Figure 3: In the diagram, the filled circles represent current watering points, while the open circles are potential watering sites.



Figure 4: Placing trap yards around watering points can assist in feral animal control.

Figure 5: Watering points can be used as a management tool as well as a production asset.



Animal movement

- Trap yards installed at watering points can be effectively used for mustering and feral animal control.
- Traps can make it easier to move stock, trap feral animals and control the grazing pressure within paddocks.
- Watering points should be turned off once all stock have been removed from the paddock. This will discourage other animals, such as kangaroos, from continuing to graze the paddock.
- For animal welfare reasons, it is important to monitor these watering points afterwards as some stock may be left behind.



What are the consequences of not controlling access to watering points?

- Increased grazing pressure and resultant management issues relating to pasture composition, groundcover and soil erosion
- Numbers of feral or pest animals may be difficult to control
- Feral or pest animals may continue to graze paddocks being rested. This may lead to a decrease in groundcover and an increased risk of erosion need increased rest, reduced profitability
- Riparian areas will become degraded, leading to lowered water quality
- Poor water quality can negatively impact on livestock production



Riparian areas may need to be fenced to allow better management of grazing Use watering points as a management tool, as well as a production asset Carefully consider water point placement and development for livestock production and conservation outcomes

Further reading

Other fact sheets in this series

No.1 Actively control feral animals No.3 Maintain and improve groundcover No.4 Managing for dry conditions No.5 Manage invasive native scrub (INS) No.6 Manage pasture species No.7 Total grazing pressure No.8 Match stock numbers to feed availability No.9 Rest pastures regularly

Case study

Good management, less stress – the Mosely family

DVD

Looking over the fence – grazing management in the rangelands, Western Catchment Management Authority, 2013

Books

Riverwise – Guidelines for Stream Management – Department of Land and Water Conservation, 1996

Managing and Conserving Grassy Woodlands – McIntyre, S, McIvor, JG and Heard, K M (eds), 2002

A Grazier's Guide to... – Local Land Services offices have a number of the guides in this series, including Belah- Bluebush, Saltbush Plains, Mallee, Mulga, Bimble-Box Pine and Saltbush-Bluebush Country

The Glove Box Guide to Tactical Grazing Management for the semi-arid woodlands – Campbell, T and Hacker, R, 2000

Web

Biograze: waterpoints and wildlife – http://savanna.cdu.edu.au/downloads/biograze.pdf

General enquiries

1300 795 299 admin.western@lls.nsw.gov.au www.western.lls.nsw.gov.au

ISBN: 978 1 74256 657 3, 978 1 74256 655 9

© State of New South Wales through Local Land Services 2015. The information contained in this publication is based on knowledge and understanding at the time of writing July 2015. However, because of advances in knowledge, users are reminded of the need to ensure that the information upon which they rely is up to date and to check the currency of the information with the appropriate officer of Local Land Services or the user's independent adviser. For updates go to www.lls.nsw.gov.au