

DESERT KNOWLEDGE CRC

The Central Australian Grazing Strategies project
Working Paper Series

Flexible rotational grazing:
Wyndham Station, NSW

D. Walsh

Working Paper

61

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Contributing author information

Dr Dionne Walsh is a rangeland ecologist with a background in herbivore grazing behaviour, rangeland monitoring and Environmental Management Systems. She is particularly interested in management of the interactions between livestock and natural systems to achieve sustainable production.

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For additional information please contact

Desert Knowledge CRC

Publications Officer

PO Box 3971

Alice Springs NT 0871

Australia

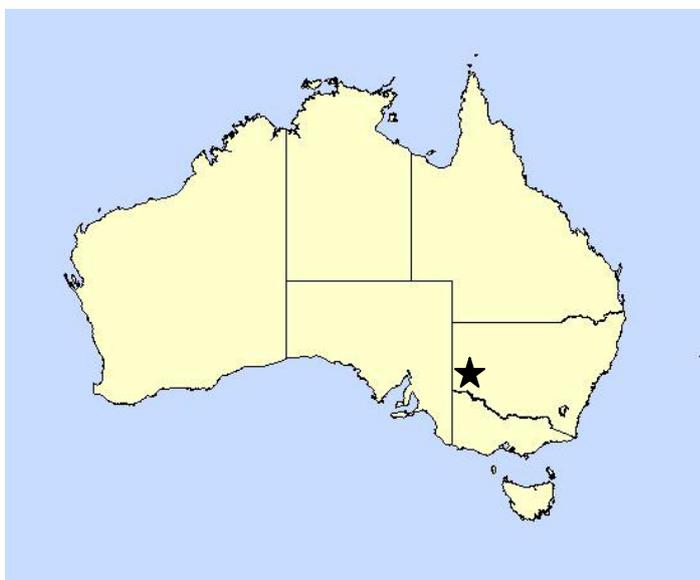
Telephone +61 8 8959 6000

Fax +61 8 8959 6048

www.desertknowledgecrc.com.au

Flexible rotational grazing

Wyndham Station, NSW



Key points

**12,500
hectare
rotational
system
(whole of
property)**

**Measurable
improvement
in land
condition**

**Dramatic
reduction in
workload
and labour
costs**

**Initial
investment
recouped
within two
years**

The Whyte family have owned property on the anabranch of the Darling River since the early 1900s. Angus and his family have been on Wyndham for ten years. The 12,500 hectare station is about 85 km north of Wentworth and encompasses a mixture of gently undulating red soil plains and self-mulching clays. The Whytes run Merino sheep with a third of the ewes mated to White Suffolk rams. In addition to the wool income, sheep are sold mostly over-the-hooks to Victorian and South Australian buyers.

The main trees and shrubs on the station are bluebush, saltbush, belah and black box. The dominant grasses are speargrass, neverfail, panic, common bottlenashers and five-minute grass. The average rainfall is 260 mm a year and is very slightly winter dominant. Rain can fall in any month, but winter rains tend to provide a better feed response.

The grazing strategy

The grazing strategy used at Wyndham is a flexible rotation system. The grazing system varies from intensive cell grazing in average and good seasons to a lower intensity, slower rotation in poorer seasons. The property is divided into 24 paddocks, and there is at least one water per paddock. A combination of plain and electric fencing is used. The system has been in use across the entire property for seven years with between 60% and 90% of the property being spelled at any given time. Initially, the Whytes attempted cell grazing with at least 90% of the property always being spelled, but they found that the stock went backwards during dry conditions. The current flexible rotation system was found to work better in these extreme seasons. More land is spelled during runs of good seasons as it is very beneficial to the country.



The Whytes attempted cell grazing but found that the stock went backwards during dry conditions. The current flexible rotation system was found to work better in these extreme seasons. Stocking decisions are also influenced by the goal for the paddock.

Image courtesy of Angus Whyte

Decision making for stocking rates, timing and spelling

Stocking rates vary and are determined with reference to historical records, forage budgets, grazing charts, monitoring site information and ground cover. Paddocks are spelled for between 40 and 300 days.

Feed budgeting is undertaken at the end of April and end of November each year. April is a key date for making stocking decisions as the system is set for lambing to occur in June (when feed conditions are likely to be at their best). If it is dry in April, the decision is made to sell ewes rather than hold them until lambing. In November, weaning has been completed and decisions regarding stocking rates for the coming summer are made before it gets too hot.

Mob sizes vary depending on the season and range from 600 to 2000 ewes. The bigger mob sizes are used when there is a large bulk of feed. In comparison, set-stocked systems in the district tend to run 150–200 sheep per water. Decisions to move stock are made by looking at the paddock they are going into to assess whether it has been rested enough and whether it is ready for livestock. If stock are spending less time grazing, this is also an indicator that they are ready to go onto fresh feed in a new paddock. Stocking decisions are also influenced by the goal for the paddock. For example, a paddock may be stocked more heavily at a certain time of the year in order to disturb the soil and provide prime conditions for the germination and growth of perennial grasses.

“There were times when we wanted to give up but we got over this by staying focussed on the end goal”

Objectives of the grazing system

The reasons for adopting time controlled rotational grazing at Wyndham include:

- improving land condition and preventing degradation
- improving production
- improving drought management
- decreasing labour requirements.

Results

Livestock and pasture

The grazing system has increased management flexibility. For example, it provides a greater opportunity to sell or buy in stock. However, Angus notes that he has not necessarily seen a significant increase in animal production in the seven years since he implemented the system. In fact, he has noticed that individual animals often perform better in set-stocking regimes, but this is at the expense of vegetation condition. Angus' aim on Wyndham is to achieve similar individual animal performance in a rotational system while improving land condition. Stocking rate is a key profit driver in his business, therefore improving land condition (and thus carrying capacity) will allow him to optimise his stocking rate in coming years.

Financials – costs and profits

Implementation required the Whytes to put in about 30 km of fencing at a cost of \$18,000 and eight more waterpoints at a cost of \$28,000. Some of the development costs were partially defrayed by funds from the West 2000 scheme. An innovation to make better use of infrastructure has been to use portable tanks. For example, they have a 3,000 gallon tank on a frame that can be moved to different waterpoints. There are no specific extra costs associated with managing the rotational grazing system; in fact labour costs and the workload have “massively declined”. The Whytes have reduced their labour requirement from one full labour unit to 0.4 of a labour unit. The full costs of infrastructure development were recouped within two years.



An innovation to make better use of infrastructure has been to use portable tanks that can be moved to different waterpoints. The full costs of infrastructure development were recouped within two years. Image courtesy of Angus Whyte

Land condition

Four monitoring sites are photographed and assessed annually to track trends in ground cover and plant diversity. Since the implementation of rotational grazing seven years ago, the monitoring sites have shown an improvement in land condition. The pastures have increased in species diversity and there is more ground cover. The density of palatable grasses and perennials has increased. Ten years ago only one or two perennial grasses were commonly found on Wyndham. There are now at least a dozen. Angus also believes that run-off has decreased, leading to less erosion. Positive results in land condition became apparent within two years of starting the new grazing system.

People

The reduced workload and labour requirements have been very positive. However, Angus notes that higher stock management skills are needed to run a more intensive management system. Angus has also noticed improved communication between family members and other people involved in the business. Learning and adaptation is ongoing and includes sourcing information from consultants and educational courses.

Drought and pest animal management

During drought mob size is reduced and excess stock are sold. As with most rotational grazing systems, keeping other herbivores from destroying the feed in spelled paddocks is an issue that needs management. On Wyndham, kangaroos are controlled by switching off waters in spelled paddocks and employing a kangaroo shooter.

Advantages of the system

Angus nominates the following as three advantages of his grazing system:

- decreased labour requirements
- it has freed up time to do other things
- improved land condition.

Disadvantages of the system

Some of the disadvantages of adopting a different grazing system have been:

- admitting you weren't using the best system before
- the increase in management in the office versus out in the ute
- increased infrastructure and associated costs to set up.

Recommendations to others who want to try it

- get good advice
- enter into it with your eyes wide open
- be prepared to ask for advice and help.

Plans for the future

Angus has a goal to treble his carrying capacity within thirty years. Seven years in, he believes this will easily be achieved.

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