

DESERT KNOWLEDGE CRC

The Central Australian Grazing Strategies project
Working Paper Series

Spelling in central Australia:
Alcoota Station, NT

D. Walsh

Working Paper

49

2009



The Central Australian Grazing
Strategies project
Working Paper Series

Spelling in central Australia:
Alcoota Station, NT

D. Walsh



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.

Desert Knowledge CRC Working Paper #49

Information contained in this publication may be copied or reproduced for study, research, information or educational purposes, subject to inclusion of an acknowledgement of the source.

ISBN: 1 74158 134 6 (Web copy)

ISSN: 1833-7309 (Web copy)

Citation

D. Walsh. 2009. *Spelling in central Australia: Alcoota Station, NT*. DKCRC Working Paper 49, The Central Australian Grazing Strategies project Working Paper Series. Desert Knowledge CRC, Alice Springs.

The Desert Knowledge Cooperative Research Centre is an unincorporated joint venture with 28 partners whose mission is to develop and disseminate an understanding of sustainable living in remote desert environments, deliver enduring regional economies and livelihoods based on Desert Knowledge, and create the networks to market this knowledge in other desert lands.

Acknowledgements

The Desert Knowledge CRC receives funding through the Australian Government Cooperative Research Centres Programme; the views expressed herein do not necessarily represent the views of Desert Knowledge CRC or its Participants.

For additional information please contact

Desert Knowledge CRC

Publications Officer

PO Box 3971

Alice Springs NT 0871

Australia

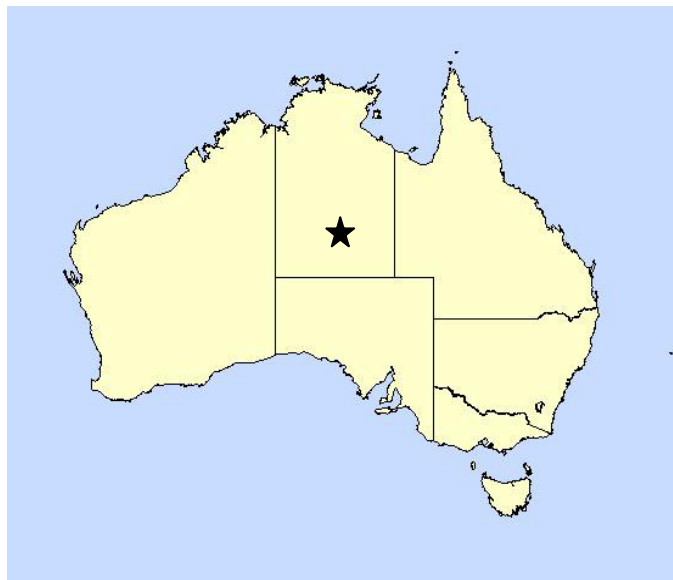
Telephone +61 8 8959 6000

Fax +61 8 8959 6048

www.desertknowledgecrc.com.au

Spelling in central Australia

Alcoota Station, NT



Key points 2,400 square kilometre station, 30% spelled at any given time	Christopher and Margo Nott have managed Alcoota station for the Alcoota Aboriginal Corporation since 1993. The station is 2,400 square kilometres and is about 110 km north-east of Alice Springs. The station is predominantly mulga country with some downs country and sandy river plains. The dominant trees and shrubs are mulga, witchetty bush, gidgee, bloodwood, whitewood and ironwood. The prominent grasses include neverfail, Mitchell, Flinders, button, buffel, silky browntop, mulga, kerosene and woolly oat.
Improved animal husbandry and herd management	The average annual rainfall at Alcoota is 250 mm and is summer-dominant. Alcoota produces Santa Gertrudis for the feedlot, live export and backgrounding markets. Cattle are mustered by trapping into holding paddocks.
High start-up costs and workload yet to be overcome	The grazing strategy Alcoota has eleven paddocks ranging in size from 100 to 300 square kilometres. Fencing is 3-4 barb suspension type and there are 25 waters on the station including dams. About 30% of the station is spelled at any given time. Christopher notes that he doesn't have a formal schedule for determining which paddocks are spelled. Rather, these decisions are based on observation with his experience telling him when paddocks need a spell. Spelling has been gradually introduced across the property since 2002 when Christopher attended a Grazing for Profit School. He feels that this and other courses have highlighted the links between good pasture and land condition and improved long-term production. Decision making for stocking rates, timing and spelling Stocking rates are variable and depend on rainfall, the time of the year that decisions are being made, feed availability and type of cattle on hand. A critical rainfall date is used to determine stocking decisions for the coming year. If no rain has fallen by the end of February it is a signal to reduce numbers. This is because experience says it is highly unlikely that Alcoota will get two grass-growing rains between the end of February and the start of winter. Stock numbers for individual paddocks are determined by the size of the paddock, the number of waters and historical performance. During the course of the year, the depth and distance of cattle pads out from waters is a key indicator when determining when to shift cattle. When cattle pads are becoming deep and defined away from water it indicates that cattle are not spreading out to graze and they are walking further to access good feed. Other indicators that Christopher uses include the height of the pasture, cattle body condition and evidence of grazing pressure on less palatable species. Wild fires are generally controlled on Alcoota to preserve pasture. However, there has been an increase in woody vegetation on the station and the Notts are considering using fire as a tool for managing this. Recent drought conditions have not provided sufficient fuel for fires on the property.

Objectives of the grazing system

The reasons for adopting the spelling system at Alcoota include:

- to improve production
- to increase the stability of production and income
- to improve land condition and prevent degradation
- to improve drought management.



The cattle are also supplemented via water medicators, which have led to better conception rates.
Image courtesy of Centralian Land Management Association

Results

Livestock

Christopher feels that cattle husbandry and herd management have improved over time. There has been a noticeable increase in calving percentages and weight gains due to improved genetics and better management of animal nutrition. Cows are put onto fresh pasture prior to cycling and calving so that they are on a rising plane of nutrition at these critical times. The cattle are also supplemented via water medicators, which have led to better conception rates.

Financials – costs and profits

Additional costs that have been incurred recently include 27 km of fencing at \$2,000/km, two 9-kilometre pipelines at \$2,000/km and \$28,000 on water infrastructure including two solar pumps. Drought conditions have continued lately and the costs of the development are yet to be recouped. The drought has also meant that the property has recently been destocked and some cattle are being agisted.

Land condition

Dry conditions have prevailed since the implementation of the spelling program, so it is not possible yet to say how the spell grazing system has influenced land condition. There are a large number of permanent monitoring sites on Alcoota and these will be useful for showing changes in the future.

People

Christopher feels that the work load has increased under the new grazing strategy. As a result, the ease of management has not actually improved. However, the improvements in production and likely benefits for pasture condition make up for this.

Drought and pest animal management

The Notts have had to destock Alcoota due to the extended drought. However, Christopher feels that once better seasons return, the grazing strategy will give him more leeway when the need to reduce numbers occurs in future. The spelling program will give him “more feed up his sleeve” when making decisions and when implementing a destocking program. Other herbivores are controlled in the spelled paddocks by turning off waters not in use.

Advantages of the system

Christopher nominates the following advantages of his grazing system:

- improved animal production
- better quality cattle
- no forced sales, more leeway for destocking in the future.



Despite the breach in this ponding bank, the success of the spelling regime, gradually introduced across the property, is illustrated in the downs country behind.

Centralian Land Management Association

Disadvantages of the system

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

- increased workload
- more infrastructure
- more cost.

Recommendations to others who want to try it

- use conservative stocking rates.

Plans for the future

The Alcoota Aboriginal Corporation is thinking of buying a backgrounding property elsewhere to complement the system. Alcoota would primarily be used to carry breeders with the sale stock being grown out and finished elsewhere. Christopher feels that this would provide more fresh feed on Alcoota for the breeders and allow him to spell more country. This would give the property greater resilience in dry times. The Notts intend to keep persevering with the strategy and look forward to better seasons.

DKCRC Partners

