DESERT KNOWLEDGE CRC

The Central Australian Grazing Strategies project Working Paper Series

Conservative stocking in D. Walsh central Australia: Lyndavale Station, NT

Working Paper 2009













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Strategies project
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Conservative stocking in central Australia:

Lyndavale Station, NT

D. Walsh













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Desert Knowledge CRC Working Paper #50

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ISBN: 1 74158 135 4 (Web copy)

ISSN: 1833-7309 (Web copy)

Citation

D. Walsh. 2009. Conservative stocking in central Australia: Lyndavale Station, NT. DKCRC Working Paper 50, 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

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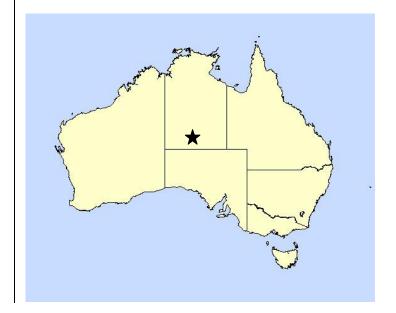
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Conservative stocking in central Australia

Lyndavale Station, NT



Key points

3,782 square kilometre property, conservatively stocked

Stocking rates and timing determined by capability of country

Good cattle and country performance, even in drought

Stability of income and profit

The Stanes family has owned Lyndavale, 260 km south-west of Alice Springs since the early 1900s. Lyndavale is 3,782 square kilometres in size and has two dominant land types. Calcareous open plains grow mainly bluebush, witchetty bush and oatgrass. The mulga sandhill country is characterised by mulga, woollybutt and bandicoot grass.

The average annual rainfall at Lyndavale is 200 mm and is slightly summerdominant. Summer rains promote good grass growth whilst winter rains tend to stimulate a range of broad-leaf herbage species. The Stanes produce Charbray X Angus for various domestic and live export markets. Cattle are mustered by trapping into holding paddocks.

The grazing strategy

Lyndavale was subdivided from Erldunda station in 1987 and was relatively undeveloped at that time. The Stanes have thus had to develop the infrastructure on Lyndavale from scratch over the past twenty years. Initially, they divided the whole property into smaller paddocks. However, John and Anne have since removed the dividing fences in the less productive mulga sandhill country as "they created a lot of work and expense in relation to their return". This mulga country is now a single large paddock managed by controlling the 25 waters within it. The 25 bores are well spread, with none having overlapping grazing zones.

The more productive country (the calcareous plains) is fenced into smaller paddocks. There is a weaner heifer paddock where the young females are put for about eight months before they are moved to the larger mulga paddock. The weaner heifer paddock thus has young cattle moving in and out of it and gets a spell every year.

When the heifers are moved to the mulga country, they are not simply mixed up with the cows already in the paddock. Instead, they are put onto three or four different bores with others of their age group. This allows the Stanes to manage the grazing regime on each bore. As the cows reach about eight years of age they are sold and these bores then get a spell until a new group of young heifers is introduced.

The Stanes also have a weaner steer paddock and a bullock paddock in the more productive country. In dry periods the grazing pressure is managed and if necessary some extra classes of steers will be trucked off depending on the markets at the time. The Stanes are in the process of dividing the bullock paddock in half to increase flexibility in managing grazing pressure and spelling.

Decision making for stocking rates, timing and spelling

The Stanes are known throughout the district for their conservative stocking rates. Decisions on how to stock a paddock are determined by the time of the year and when cattle are being moved or sold. Rather than using "critical dates", the Stanes aim to retain perennial grass butts and good ground cover at all times. John and Anne believe that it does not make sense for them to rely on

critical dates because rainfall his highly variable and also the vegetation response to rainfall can vary markedly depending on when it falls.

Stocking duration on Lyndavale is a mixture of variable and set depending on the paddock (and season). The more productive country tends to be grazed and spelled annually because the weaners and sale cattle are moving in and out of these paddocks throughout the year. The large cow paddock in the mulga country is typically set-stocked with about 120 -150 cows per bore. The oldest cows are sold every year, thus three or four bores are spelled until weaner heifers are introduced the following year. Under this management, the country and cattle handle drier seasons quite well. When serious drought conditions begin to develop, decisions to reduce numbers are made early to capitalise on better prices, good animal condition and to preserve the country.

In addition to ground cover and perennial grass butts, the Stanes observe the amount of biomass remaining, the presence/absence of indicator species and rainfall throughout the year to adjust the numbers and locations of cattle. John and Anne are currently developing a recording system that rates the pasture and stock condition on a scale, including photos of each. They are also looking at doing some testing of dung samples to fine-tune the management of their cattle nutrition.

In terms of fire management, wild fires are generally left to burn unless they are threatening infrastructure. When fuel loads permit, the Stanes use fire as a tool to control scrub and to freshen up grasses in the mulga country. Fire is kept out of the productive country wherever possible.

Objectives of the grazing system

"You have to ensure that every beast has a good return when deciding how to develop country"

The reasons for adopting conservative stocking rates and managing different country types to suit their capability at Lyndavale include:

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

Results

Livestock

John and Anne have been benchmarking their financial and production performance since 2000. Over that time, they have been able to increase their turn-off numbers, increase herd fertility, improve the quality of their stock and increase their return/animal. This year the Stanes have achieved their highest calving rates ever despite the serious drought conditions being experienced in the district. They have also achieved a reduction in herd mortality in this time. The Stanes attribute these results to being strict about selling older cows and having a younger-on-average cow herd, and year round supplementation of phosphorus and urea.

Financials – costs and profits

The Stanes had to develop the infrastructure on Lyndavale from scratch and have invested about \$2,000,000 over the past 20 years. They feel that the development of smaller cow paddocks in their less productive country early on was a costly mistake and these have been removed. Due to ongoing labour problems in the industry, the Stanes have built yards and laneways at each bore to streamline cattle management and reduce labour costs. Decisions about development have considered the costs versus the number of stock that will be able to be run and the return per head. Despite the high development and maintenance costs, the grazing strategy has allowed them to generate a profit and a stable income every year, even in very dry periods. This means that the developments have been paid for already and also allows the Stanes to continue investing both on and off the station.

Land condition

Land condition on Lyndavale is recognised by local land management agencies as being better than most other areas in the district. This is supported by the fact that Lyndavale retains good cover levels during droughts and there is no soil erosion or weeds. The Stanes feel that good land condition gives them a buffer for making decisions on when to reduce cattle numbers if seasonal conditions deteriorate. The reduction in rabbit numbers as a result of calicivirus has seen an increase in the density and diversity of flora on the station.

People

The Stanes have used a mixture of experience, observation and formal learning to develop their grazing system. Anne has a Bachelor of Agriculture and a Masters degree and they have both attended many courses over the years. The Stanes have been involved in the Southern Beef Producers benchmarking group since its inception in the 1990s and this has driven further innovation in their management.

"Positive results are apparent during drought times"

Drought and pest animal management

During drought conditions, the Stanes take early action to reduce their stock numbers. If drought conditions continue after the oldest cull cows have been removed, younger cows have to be culled which impacts on future calf output. Serious droughts also have a negative financial impact in that cattle are turned off younger when they are lighter. Despite these costs, the Stanes feel that it is more important to maintain the country in good condition for the long-term benefit of their business.

The main pest animals impacting on Lyndavale are rabbits and, increasingly, feral camels. Rabbit calicivirus disease has had a dramatic impact on rabbit numbers and the Stanes are seeing increases in some acacia species as a result of lower rabbit numbers. Camels damage fences in the mulga country and are shot to control their numbers.

Advantages of the system

John and Anne nominate the following advantages of their grazing system:

- keeping country appropriately stocked results in very good response to rainfall
- · constant (predictable) income
- · cattle always in good condition.

Disadvantages of the system

Some of the disadvantages of adopting this grazing system are:

- may "miss out" when prices are high due to lower cattle numbers
- · high maintenance costs of extensive bores and infrastructure system.

Recommendations to others who want to try it

- · improve your property using infrastructure and genetics
- research and talk to people and go and see others
- think about the long-term.

"In such a variable climate there are no hard and fast rules – you have to respond to what is going on around the place"

Plans for the future

Lyndavale still has a bit of country that hasn't been used because it hasn't been developed. The Stanes are in the process of opening up this area by investing in infrastructure. However, once that country is developed there is no more and John and Anne feel that the next generation will probably have to buy more country to increase revenue. This is a concern to the Stanes because buying more land is becoming cost prohibitive.

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