SA Drought Hub Technical Report

Improving drought grazing management in the non-arable ranges of the Northern & Yorke region.

PROJECT LEAD: Northern & Yorke Landscape Board

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Australian Government Department of Agriculture, Fisheries and Forestry







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PROJECT SUMMARY

Our project, "Improving Drought Grazing Management in the Non-arable Ranges of the Northern & Yorke Region," aimed to enhance sustainable land management practices in pastoral areas of the Southern Flinders. We conducted two electronic ID workshops, and a comprehensive two-day dry season grazing management workshop led by Dick Richardson at Carrieton. The project also included two soils workshops with personalised extension sessions, focusing on identifying challenges in pastoral soils such as water retention, trace mineral deficiencies, and soil carbon levels.

Through these efforts, we equipped local stakeholders with practical knowledge and tools to improve drought resilience and grazing practices. The project's outcomes include enhanced grazing management strategies, better soil health assessments, and increased awareness of sustainable land use practices. This initiative benefits pastoralists, land managers, and the broader community by promoting more resilient agricultural practices and fostering long-term environmental sustainability in the region.

EXECUTIVE SUMMARY

Project Objectives:

The project aimed to enhance drought resilience and sustainable grazing management practices in the non-arable ranges of the Northern & Yorke Region. Key objectives included improving grazing management and planning to provide greater resilience during extended dry seasons, assessing soil health factors affecting water retention, trace minerals, and soil carbon levels, promoting sustainable land use practices, and providing graziers with information around their obligations under the rollout of compulsory eID tags and their potential to build agribusiness resilience.

Deliverables:

Conducted two electronic ID (eID) workshops focusing on:

- Educating graziers about their obligations under the compulsory eID tag rollout.
- Delivering content on the on-farm benefits of eID tags, particularly in data-driven decision making during dry periods.
- Providing biosecurity and traceability information crucial for graziers.

A two-day dry season grazing management workshop led by Dick Richardson, attended by 11 participants, covering basic grazing naturally methods, stock flows, and feed budgeting. Feedback was positive, indicating practical applicability to participants' properties.

Delivered two soils workshops with extension focusing on increasing drought resilience of participants:

- The pastoral soil workshop, with extension at Almerta and Pinegrove Stations, focused on improving water infiltration and identifying trace mineral deficiencies.

- The Bangor/Northern YP soil workshop focused on building soil carbon and converting marginal cropping land into mixed species pastures to diversify agribusiness risk.

Recommendations and Future Actions:

There were several issues relating to low attendances due to a saturation of competing agricultural workshops across the Mid North in recent times. This is reflected in the recommendations of;

- Adopting shorter, more digestible workshop formats with a larger social aspect to enhance attendance.
- Improving communication with the private agricultural sector, agricultural bodies, and NGOs to coordinate workshop schedules and locations, reducing overlap and maximizing participant engagement.
- Continued support for improving grazing management regimes via ongoing workshops and extension services.
- Collaboration with local agricultural agencies and organisations to facilitate broader adoption of sustainable land management practices.

Future Workshops and Funding:

NYLB has secured funding through a Pygmy Bluetongue Lizard – Saving Native Species grant to conduct an additional four grazing-related workshops over the next 12 months. These workshops will further provide accessible grazing management tools and information to graziers in the Mid North region, enhancing drought resilience and sustainable practices.

Benefits to Stakeholders:

Stakeholders predominantly pastoralists and land managers benefited from this project through;

- Provided practical tools to landholders to improve their grazing management planning and practices leading to enhanced livestock productivity and resilience during droughts.
- Better soil health assessments enabling more effective land management decisions.

Adoption Opportunities:

The practices and insights from the workshops run as part of this project are immediately applicable to pastoralists and land managers within our region. Adoption can begin immediately following dissemination of findings and ongoing support via Dick Richardson and our Sustainable Agriculture Coordinator Molly O'Dea. Follow-up soil testing for landholders converting cropping areas to pastures will be provided by NYLB in late 2024, with the Landscape Board covering costs and labour.

Support for Adoption:

For further information and support on adopting the project outcomes, please contact: Nick Modra, Landscape Officer at Northern and Yorke Landscape Board via email at nick.modra@sa.gov.au.

PROJECT BACKGROUND AND OBJECTIVES

The original scope and objectives did not differ from those delivered other than the reduction of the grazing workshops from two workshops to one. This was reflected in a project variation, reducing the funding and number of workshops. This change was necessary to make as there were only two attendees RSVP'd for the Eudunda workshop, despite it being heavily advertised to local ag groups and the general community.

There were no project details provided in Annexure D to refer to, but all Milestones and deliverables were achieved without issue other than the reduction in grazing naturally workshops. The scope of the project was met, expanding grazing management teachings towards dry season management and drought preparedness, two topics of particular importance north of Goyder's Line.

LOCATION

Where demonstration sites, field trials, events or other activities have been conducted, provide the following location details in the table below: latitude and longitude for field trials, or LGA for events and other activities. (Add additional rows as required.)

Site # and name	Latitude (decimal degrees)	Longitude (decimal degrees)	LGA
Carrieton Rodeo Clubrooms			District Council Orroroo Carrieton
Robertstown Hall			Regional Council of Goyder
Almerta Station			District Council Orroroo Carrieton
Pinegrove Station			District Council Orroroo Carrieton
Bangor Soil Site	32.950667	- 138.163588	District Council of Mt Remarkable
Tickera Soil Site	33.914085173° S	143.679746497° E	Copper Coast Council
Kainton Soil Site	34.131860299° S	143.895015459° E	Yorke Peninsula Council

RESULTS



Figure 1: Delivery of the Robertstown eID workshop featuring members of Goyders Line Agricultural Network (GLAN) 12th Sept 2023. Photo: Jessie White



Figure 2: Dick Richardson discussing the pasture and soil health within a previously set stocked paddock at the Carrieton Dry Season Grazing workshop 20th Mar 2024.. Photo: Nick Modra

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	API	1,9	Rolling low hills	LIDI	D	often rocky, soils with sandy textures ranging from loamy sand to sandy clay loam.	4			
	APJ	1.2	Steep low hills	LIDI	D	APII Rolling rises with eraded watercourses. Relief is 9-30m, slopes are 10-30%				
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	AYI	0.1	Rolling low	A2LIRR	D	Hills and rises on calcareous fine-grained rocks. Att Rolling low hills with eroded watercourses. Relief is 30-90m				Fiona O'De

Figure 3: Delivery of the pastoral soil webinar by Geoff Keow 13th *May* 2024.



Figure 4: Carrieton Dry Season Grazing Management workshop attendees are run through stock flows by Dick Richardson 21st Mar 2024. Photo: Molly O'Dea

CONCLUSION

The project "Improving Drought Grazing Management in the Non-arable Ranges of the Northern & Yorke Region" has made significant strides in enhancing drought resilience and sustainable grazing practices through targeted workshops and extensions. Key findings highlight the efficacy of soil health workshops in improving water infiltration and identifying trace nutrient deficiencies, as well as the benefits of converting marginal cropping land into mixed species pastures to diversify agribusiness risk.

Further adoption and extension opportunities are facilitated by upcoming grazing workshops funded through threatened species grants, focusing on enhancing grazing management tools and practices. Challenges such as workshop attendance and scheduling overlaps require strategic adaptations in format and improved stakeholder engagement. Continued collaboration with local agricultural bodies will be essential to maximize the adoption of sustainable land management practices, ensuring long-term resilience for the Northern & Yorke agricultural community.

APPENDIX 1: MEL SUMMARY DATA

LEARNING ACTIVITY SUMMARY

Activity name *To add more rows right click & select insert / insert rows below	Type of activity farm visits seminars Training workshop field days crop/pasture walk 	Location of activity (LGA)	 Primary category of participants Farmers/Producers, Government extension officers, Private consultant or agribusiness agent, Businesses, Local farmer groups / networks 	 No. of participants (by category) Farmers/Producers, Government extension officers, Private consultant or agribusiness agent, Businesses, Local farmer groups / networks 	Primary focus area	Delivery style online face-to-face dual delivery 	No. of products developed, adapted or used to support activity • decision tools • information sheets • fact sheets
elD workshop	Workshop	Goyder/Robertstown	Graziers	Farmers/Graziers x 17 NYLB employees x 3 1 x NGO employee 1 x Private consultant	Compulsory eID tag rollout, using eiD tag data to feed in to on farm decision making	Face to face	
Grazing workshop	Workshop	Carrieton	Farmers	Farmers x 10	Planning grazing over the non- growing season, feed budgeting, calculating carrying capacity.	Face to face	- Stock book Stock management flow spreadsheet
Soils workshop	Workshop	Remote	Farmers, agribusiness agent	12 x Farmers 1 x Agribusiness agent	Benefits to farm businesses of soil testing to highlight	Online	

					changes in grazing management and pasture composition.		
Soils extension	Soil and plant testing	Belton & Southern Flinders	Farmers	4 x Farmers	Soil testing for delivery of workshops	Face to face	Soils report

COMMUNICATION ACTIVITY SUMMARY

Category *To add more rows right click & select insert / insert rows below	Overview	No. issues/posts/? (i.e. how many generated/ produced)	No. of subscribers/ visitors/ followers	Feedback (if available)
EXAMPLE ROW: Newsletter	SA Drought Hub Monthly Newsletter	6 (Jan to July 2022)	592	Hub partners like receiving updates on the Hub and FDF opportunities that are promoted through the newsletter.
Newsletter	NYLB Yakka	2	1700	
Website				
Social media	NYLB Facebook	2	4,300	Heavily shared by other organisations, 23 shares, 33 reactions
Media				
Ad hoc communiques to partners	Direct distribution via email	5	180+	Shared by UNFS and other ag groups
Podcasts				
Other				