

Lyndon Station Rehydration and Biodiversity Project



CRAB HOLE COUNTRY AFTER RAIN

Crab holes, also called gilgais, are a unique Australian landscape characterized by small mounds and depressions in heavy, expanding clay soils.

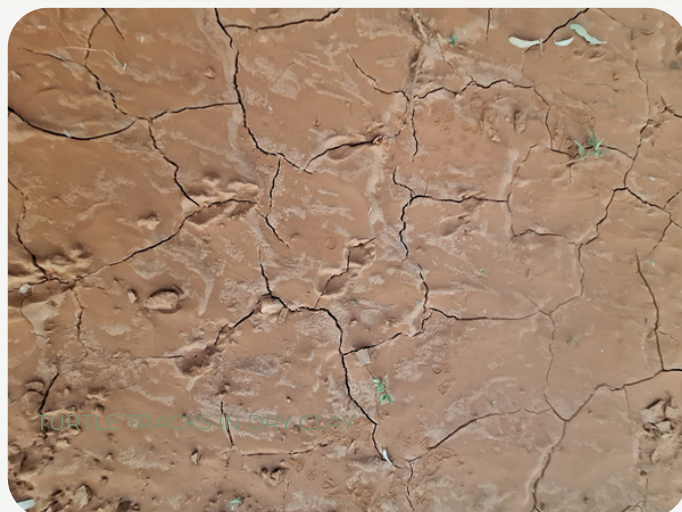
Crab hole country is vulnerable to overgrazing as it holds water for extended periods after rain. If not managed, this can create large, scalded areas that reduce pastoral productivity.

REGENERATING THE RANGELANDS

Lyndon Station is committed to protecting fragile crab hole country. The project includes fencing 300 hectares of important habitat, installing a new water point, and testing different grazing and spelling strategies. It will assess how these measures support landscape recovery and improve ecosystem health.

When in good condition, crab holes create ecological hotspots that support a wide range of flora and fauna.

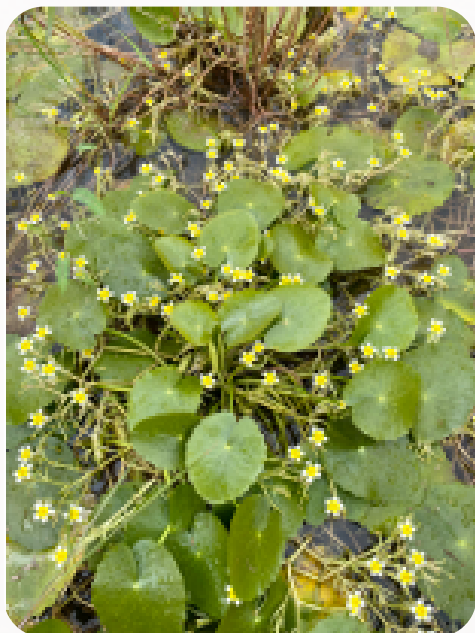
This trial aims to demonstrate how a commercially operated cattle station can simultaneously improve its grazing production, restore landscape health, and generate environmental co-benefits.



TURTLE TRACKS IN DRIED CLAY



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NYMPHOIDES WALSHIAE

Previous restoration work on Lyndon Station identified a new species of water lily (*Nymphoides walshiae*) and extended the range of another water lily (*Otella ovalifolia*) by 700km.

As biodiversity increases, landscapes functions such as improved water infiltration and nutrient cycling are more effective.

This reduces the exposure to damaging processes such as erosion and soil compaction, and creates better conditions for desirable pasture species to grow.



HEALTHY SOIL



BIODIVERSITY



HEALTHY CATTLE

The Bloodwood crab hole exclusion showed remarkable improvement when fenced from grazing.

A healthy rangeland environment retains and promotes perennial pastures, reduces erosion, provides a range of habitats for native species and improves pastoral productivity.



A HEALTHY LAKE SYSTEM AFTER RAIN

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PUTTING RECOVERY TO THE TEST

The next stage of the recovery process focuses on the Beroi crab hole, where three grazing strategies will be trialled and measured against a control area outside the exclusion zone.

STRATEGY 1 –

**COMPLETE
GRAZING
EXCLUSION**

STRATEGY 2 –

**EXCLUDE LIVESTOCK
BUT ALLOW NATIVE
HERBIVORES**

STRATEGY 3 –

**TIME-CONTROLLED GRAZING
UTILIZING HERD IMPACT WHEN
SEASONAL CONDITIONS ALLOW**

Planned works include fencing 300ha around the Beroi crab hole and implementing three grazing strategies.

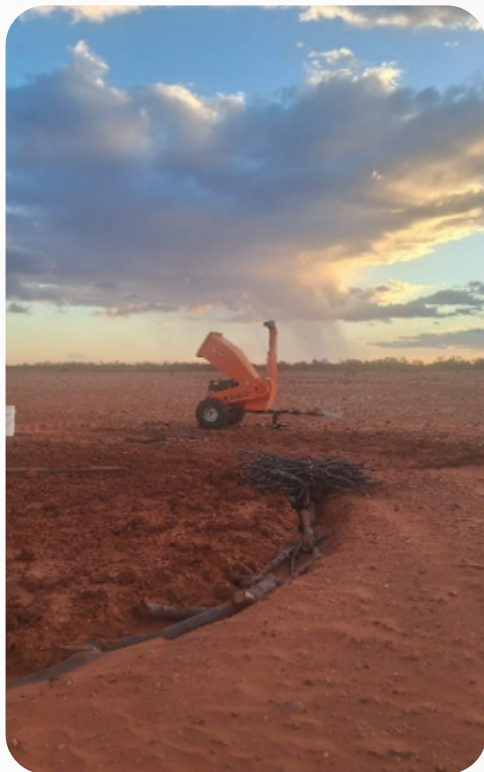
Pasture recovery will be compared to a control area outside the fenced exclusion zone



Data collected in this demonstration will provide valuable insights into the effectiveness of resting pastures to facilitate spelling of heavily utilised country, particularly in low rainfall environments.

Results will be released in 2028

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Additional interventions include:

- Installation of a new water point to reduce reliance on crab holes
- Slowing the movement of water through machine regeneration work
- Introducing carbon and mycorrhiza to the soil

This demonstration will contribute to filling the knowledge gap around how grazing and spelling interact, and how managed grazing can best be utilised to optimise beef production while improving or maintaining land condition.



This project is funded by the Australian Government Natural Heritage Trust and delivered by Rangelands NRM, a member of the Commonwealth Regional Delivery Partners panel



An Australian Government Initiative

