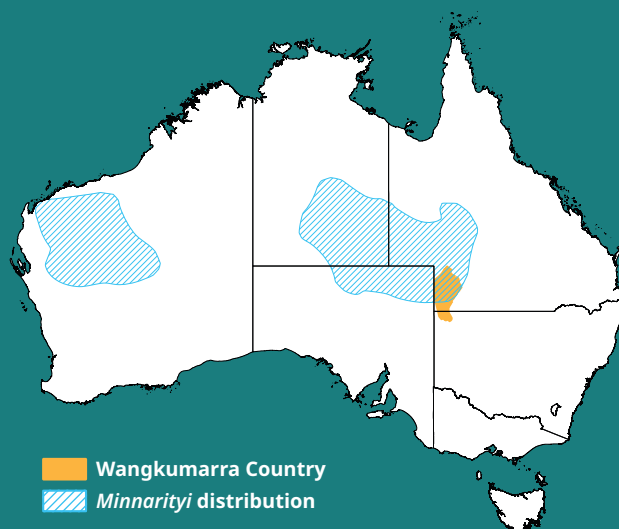


Minnarityi (Red mulga) on Wangkumarra Country

© Mirritya Ebsworth, Wangkumarra

Common names: Red mulga, Creepline mulga
Scientific name: *Acacia cyperophylla* var. *cyperophylla*
Language names: *Minnarityi*, *Minna richi*, *Miniritchie*



Status



Description

Minnarityi are perennial single- or multi-stemmed large shrubs or trees, growing to a height of around 7-12 m. They have distinct curly russet red bark which peels off in strips, pungent dull green terete phyllodes (modified leaves) between 10-15 cm long, and yellow cylindrical flower spikes. The species generally flowers between May and December, but typically flowers soon after rain or flood events.



Minnarityi. Photo: Linda/stock.adobe.com

Distribution

Minnarityi have a scattered distribution in arid regions occurring in two distinct clusters in Australia: one widespread cluster in the central desert areas of the Northern Territory, Queensland and South Australia, and the other cluster in north-west Western Australia.

Habitat

Minnarityi grow in arid to semi-arid regions, along creek beds and drainage lines on sandy or stony soils. They prefer soils that have slightly higher moisture but they tend not to grow along channels of permanent water. Mature trees are found within 10 m of a creek bed, while juvenile trees tend to be found in the creek bed itself.

Threats

Threats to *Minnarityi* include:

- **Overgrazing by livestock** leading to soil degradation and compaction, loss of vegetation and altered ecosystem dynamics
- **Mining** operations that require land clearing and pollution runoff resulting in habitat fragmentation
- **Feral animals such as goats and pigs** causing soil degradation, trampling of small trees and grazing of seedlings and saplings
- **Climate change** leading to increased temperatures in a region where they are already extreme
- **Invasive weeds**, particularly Buffel grass, impacting recruitment and leading to increased fire frequency.

Cultural Connections

Minnarityi hold deep cultural, ecological and spiritual significance for Wangkumarra. As a vital component of the cultural landscape with their many traditional uses, *Minnarityi* reflects the interdependence between Wangkumarra culture and environment.

Minnarityi are strongly tied to Wangkumarra spirituality, as evidenced by the intricate markings on artefacts such as tools and weapons. *Minnarityi* were a direct food source (seeds for flour), an indirect food source (insect larvae, providing nesting for birds), and their bark was used in fishing strategies. Their leaves and bark were used as a medicine.

The fragmented distribution of *Minnarityi* raises questions about genetic variation between the two clusters and whether these populations are adapting to local conditions, possibly leading to speciation.

Understanding the distribution patterns and the mechanisms by which they arose in these clusters could provide valuable insight into the ecological requirements of *Minnarityi*, their role in the broader landscape, and the interactions between the Aboriginal groups where the species is found. It is possible that the seeds were traded between groups, and investigations into this would reveal valuable cultural understandings of how Aboriginal people interacted across vast distances, how trade routes were used, the types of goods that were traded, and the uses of those traded items.





Cultural Values

Country

Minnarityi represent more than merely a population of trees in Outback Australia; they are a cornerstone of Wangkumarra cultural and ecological identity.

The fact that **Minnarityi** have a limited habitat range near ephemeral watercourses makes them a natural indicator for the presence of subsurface water. Their growth patterns, recruitment success and responses to extreme climatic and hydrological variations are linked to soil health and environmental stability.

Knowledge

For millennia, Wangkumarra have observed interactions between **Minnarityi** and ecosystem elements such as grasses, shrubs, and a wide range of insects, birds and animals, and understand the nuances of Aboriginal relationships and what they mean for the environment as a living entity. Changes in animal behaviour or plant cycles can be used to provide insight into environmental or climatic changes, and these observations can be used to develop sustainable strategies for environmental management.

Kin

Empowering Wangkumarra to make decisions on how to manage learning programs and ecological restoration programs is crucial for ensuring the long-term protection of culture and the environment. Embedding Traditional Ecological Knowledge (TEK) into management plans, policies and governance structures will provide a platform for Wangkumarra to assert autonomy and advocate for practices that align with cultural values and to be actively engaged in caring for Country.



*Mirritya Ebsworth standing next to a **Minnarityi**.
Photo: Jessica Geerligs.*

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Results of Poor Management

Lack of access and decision-making for Country

Traditional management practices, rooted in millennia of observation and adaptation, are important for sustaining ecosystems and maintaining the cultural and spiritual well-being of Wangkumarra. Historical racist policies and the resulting forced removals have prevented Wangkumarra from fulfilling cultural responsibilities for nearly a century.

Much of Wangkumarra Country is subject to mining or pastoral leases, with access restrictions for Wangkumarra that prevent cultural practices from being performed. Native Title offers some rights to land access but does not grant full authority over land access or management. Current land management practices and fragmented land management are subject to the landholders' interests and activities. For example, while mining companies engage Wangkumarra cultural advisors to survey sites for archaeological protection, ultimately any decisions about pipelines, wells, roads, fences and other infrastructure are made by the company.

Inadequate funding and resources for land management

Wangkumarra have limited access to training, tools and financial support to sustain Traditional practices in a modern context. While Wangkumarra are in a new and exciting era for the revitalisation of culture, there are significant access barriers to overcome, such as the logistics of getting people to this remote region characterised by vast distances, poor roads, infrastructure scarcity, environmental stochasticity and hydrological variability.

Poor environmental management policies

Environmental management policies typically favour short-term economic gains over long-term ecological and cultural sustainability. This results in the degradation of habitats, further compounding the challenges for Wangkumarra seeking to apply Traditional management techniques.



National Environmental Science Program



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Vision for Wangkumarra

New beginnings

Wangkumarra were conferred Native Title in July 2024. This marks the start of new beginnings for Wangkumarra to return to Country, either for regular cultural gatherings or, for some, as permanent residents. This new era will help Wangkumarra heal from the traumas and disruptions of their collective experiences, and will enable Traditional knowledge to be reignited, reclaimed and passed down through generations.

Shifts in governance, policy and practice

Collaborative management strategies that incorporate and prioritise TEK into conservation plans and threat abatement for Culturally Significant Entities such as *Minnarityi* are required.

Key actions that could ensure TEK is recognised and applied to the stewardship of Wangkumarra Country include formalising co-management agreements.

Conservation and threat abatement plans should also include explicit objectives and methodologies based on TEK. For example, specific strategies for maintaining *Minnarityi* habitat should include guidelines on reducing invasive species, maintaining soil health, and reducing soil compaction and over-grazing impacts from livestock.

Greater opportunities for intergenerational knowledge transfer

Collaborative programs that support the documentation, revival and intergenerational transmission of TEK could include on-Country workshops and ranger programs to empower Wangkumarra to take leadership roles in land management practices.

Collaborative management must address barriers to accessing culturally significant sites, including logistical support for Elders and community members. In order for Wangkumarra to be on Country for extended stays to observe, manage and connect with their land, there must be funding and infrastructure for transport and amenities.