

An aerial photograph of a river system with various colored banks (green, brown, grey) and a blue river. A large yellow circle is overlaid on the image, containing text. A white horizontal line is positioned above the text.

**NARI NARI TRIBAL
COUNCIL LTD**

**KANGAROO
MANAGEMENT
PLAN**

2022 / 2027



This report is about the estimation, monitoring and control of kangaroo populations across the lands owned and managed by Nari Nari Tribal Council (NNTC). Kangaroo populations are managed for two interdependent reasons: to prevent large die-offs of kangaroos during drought and because they are believed to impede the ecological restoration of grassland ecosystems, including the nationally endangered Riverina Depression Bioregions and Plains Wanderer habitat.

Native animals are protected in New South Wales by the Biodiversity Conservation Act 2016 (BC Act). Under the BC Act, it is an offence to harm, buy or sell kangaroos for commercial purposes without a licence.

In this plan 'kangaroo' refers to both the Eastern Grey Kangaroo (*Macropus giganteus*) and the Red Kangaroo (*Macropus rufus*), common to the Hay Plains and Low Bidgee regions of NSW.

GOAL

The goal of this kangaroo management program is to maintain ecologically sustainable populations of kangaroos throughout NNTC owned or managed lands.



The Australian word 'kangaroo' derives from 'Gangurru', the name given to Eastern Grey Kangaroos by the Guuga Yimithirr people of Far North Queensland.

In the Nari Nari and Wiradjuri language, there are many phrases for 'kangaroo', including wambuwuny, bundharray, ganhur, buringin, marri, bandha and baabay.

Pre-European contact, Aboriginal people across Australia used kangaroo as a common source of meat instance, and used the tendons as string, fishing line and a binding to attach spear and axe heads.

Kangaroo fur is very soft and often used as capes, blankets, mats and shoes. Aboriginal people also used kangaroo skins as traditional water carriers. Skilled hunters were able to remove the bones and internal organs of the kangaroo without damaging much of the skin so the skin could be used as a water carrier. Balls can also be made from kangaroo scrotums. These balls are used in the traditional game/sport known as Marngrook from which AFL has its origins.

Kangaroos are of cultural, social and spiritual significance to Aboriginal people, however in the past, Aboriginal people have had very little involvement in Government decisions about kangaroo management. On NNTC lands, at Gayini, Toogimbie, Glenhope and Lorenzo, all land management decisions are made by Aboriginal people, who weigh up the needs of the land, the environment and the native plants and animals they protect.



RATIONALE FOR MANAGEMENT

As the environments of Gayini, Toogimbie, Glenhope and Lorenzo improve under NNTC management, there is the possibility populations of kangaroos in some areas may reach very high densities because of access to good quality food, permanent water, and a lack of introduced predators (foxes and cats). Reduction on predators is part of the ongoing pest management works on Gayini, and NNTC recognises this may result in additional challenges in terms of kangaroo numbers.

Historically, Aboriginal hunting, drought and predators such as dingoes have controlled kangaroo populations. The loss of these controls in many areas has allowed kangaroo populations to flourish.

In over-populated areas, kangaroos can cause damage to the habitat of other native, threatened species, pose a risk to the safety of staff and researchers, and can suffer starvation from over-grazing. Kangaroo control is important in these areas to protect the environment, people and the welfare of kangaroos. NNTC has a responsibility under the Work Health and Safety Act to provide safe working environments for staff.

At such large numbers, kangaroos graze on grassy vegetation until it is like lawn, which leaves no shelter for other animals, such as insects, birds and reptiles.

At Gayini, sightings of the Plains Wanderer (*Pedionomus torquatus*) a small grass dwelling bird listed nationally as threatened, means grasslands habitat conservation is vital.

Damage to infrastructure when kangaroo numbers are excessive must also be considered. Kangaroos can damage Aboriginal Cultural sites when they camp on mounds and burial sites, and damage exclusion fencing that is intended to protect sites and remnant vegetation communities.

Neighbour relations are a focus of NNTC's community engagement endeavours and an important consideration. Adjoining lands are used for many purposes, such as cropping, livestock production, tourism and conservation, and NNTC recognises the rights of neighbours to conduct their business without undue impact from NNTC activities.

As eWater and flooding impact the Gayini and Toogimbie wetland and floodplain areas, kangaroos are pushed across boundaries from the NNTC conservation areas and into neighbouring properties. Managing kangaroo density on NNTC lands is important to ensure stable and positive neighbour relations into the future.



INDICATORS OF OVER ABUNDANCE OF KANGAROOS

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When kangaroo grazing pressure is recorded as 'high', Land Mangers will make an informed decision about additional culling efforts, taking into consideration the area in which pressure is observed; Land Managers may decide no action is required, even where more than 100 kangaroos per square kilometre are observed, depending on available feed and shelter, and co-habitation with other species.

Land Managers may undertake additional non-commercial culling, in accordance with the National Code of Practice for the Humane Shooting of Kangaroos, in consultation with NSW National Parks and Wildlife.

Similarly Land Managers may pause or cancel professional kangaroo shooter access to NNTC lands, when numbers are observed to have dropped below 25 kangaroos per square kilometre.

The over arching priority of kangaroo management on NNTC lands is to protect the iconic Australian marsupial, and keep a healthy, diverse population of animals, that does not negatively impact on habitat, neighbours and staff.

METHODOLOGY OF CONTROL ON NNTC COUNTRY

In Australia, fertility control, fencing, and shooting are the methods used to control kangaroo populations. The appropriateness of each method depends on the size of the kangaroo population, surrounding habitat and the expertise of the person undertaking the control.

Fertility control requires kangaroos to be captured which poses risks to animal welfare. It is only effective at reducing numbers where kangaroo populations are restricted to a certain area.

Exclusion fencing is costly to install and maintain. It also poses risks to animal welfare as excluding populations that are over-abundant may lead to mass starvation. NNTC Land managers will continue a program of fence inspection and maintenance, and plan for removal of unnecessary fences that restrict the movement of native animals across protected lands.

Shooting is considered to be the most effective and humane method to control kangaroos because the animals die quickly and it reduces the numbers rapidly. The lethal control of kangaroos by shooting must be done in accordance with the National Code of Practice for the Humane Shooting of Kangaroos.

NNTC will partner with licenced and experienced kangaroo shooters, licenced by NSW Department of Planning, Industry and Environment Wildlife Team, to undertake commercial harvesting.

Professional shooters are issued with kangaroo tags, under quotas released annually in the NSW Quota Report, which ensure the mammals are not over hunted.

RESOURCES AND REFERENCES

NSW Department of Planning, Industry and Environment

Bush Heritage Australia

Wiradjuri Language Program dictionary; Dr Stan Grant and Dr John Rudder

Welcome to Country www.welcometocountry.org

National Code of Practice for the Humane Shooting of Kangaroos and Wallabies.

