Martu Living Deserts Project – partnering for conservation led by Indigenous people

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Abstract

While most of Australia's aridlands have suffered either total loss or serious declines of native fauna, the Martu lands in WA's Western Desert in the eastern Pilbara provide one of the last wild havens for some of Australia's iconic but highly threatened desert species.

With support from the Australian Government, an innovative partnership between The Nature Conservancy (TNC), BHP Billiton Iron Ore (BHPBIO) and the Martu people (represented by Kanyirninpa Jukurrpa – KJ) is achieving exciting social, cultural, economic and environmental outcomes. TNC has been able to bring its strategic conservation planning experience in landscape scale projects to assist the Martu people build capacity and fulfil their desire to preserve their culture while actively managing their 13.6 million hectare native title determination area.

Through KJ as the local delivery partner, Martu people are returning to work on country to:

- clean and protect water holes;
- improve fire management;
- manage feral herbivores and predators;
- manage cultural heritage;
- protect priority threatened species (such as the Greater Bilby); and
- translocate rock-wallabies (and potentially other species) into their former habitats.

The project provides significant employment opportunities for Martu men and women in ranger teams working throughout the native title area. It is also generating measurable social, cultural and economic benefits for Martu people and environmental benefits for part of the most intact arid ecosystem anywhere on Earth.

Introduction

The Martu people of Australia's Western Desert region have been living on and managing their land for thousands of years. Martu country is strikingly beautiful but can also be extremely harsh and unforgiving. It has been described as 'the harshest physical environment on earth ever inhabited by man before the Industrial Revolution' (Gould 1969). It is perhaps for this reason that Martu people were amongst the last Indigenous Australians to come into contact with European Australians, as recently as the 1960s.

After a long struggle, Martu were granted exclusive native title to their lands in 2002, at the time the largest native title determination in Australian history (13.6 million hectares or roughly twice the size of Tasmania). The native title area extends over large parts of the Great Sandy, Little Sandy and Gibson Deserts (Figure 1).

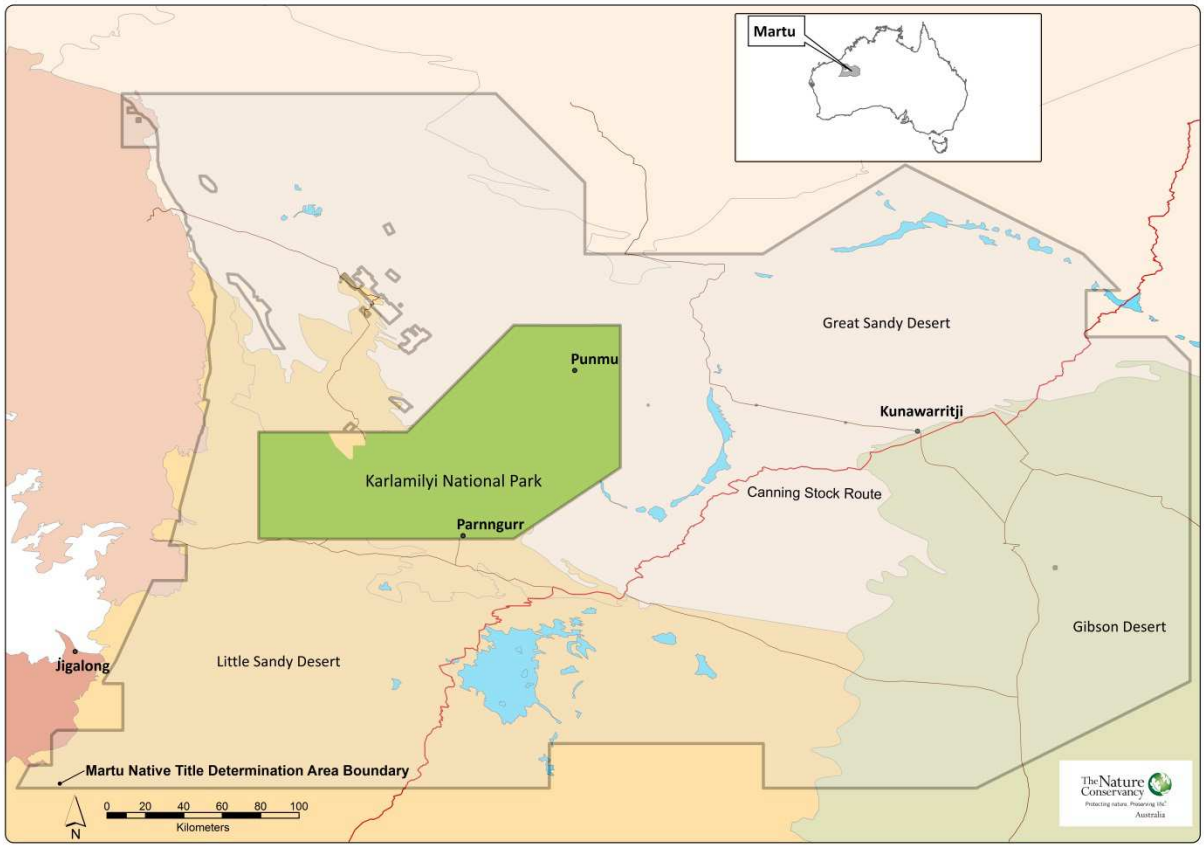

Figure 1. Martu native title determination area.

After achieving native title, the priority for Martu people was to find a way to leverage those rights in a way that would enable them to go back to their country, teach young people about country and look after country. These cultural imperatives drove Martu people to seek partners they could work with to manage their land while improving economic opportunities for their people.

Building a project

Through an Aboriginal corporation known as Kanyirninpa Jukurrpa (KJ) based in Newman, in Western Australia's Pilbara region, Martu people set about developing ways to fulfil these cultural imperatives and manage their lands. Early support came from a number of partners including the Australian Government through its *Caring for our Country* and *Working on Country* programs.

More recently BHP Billiton Iron Ore and The Nature Conservancy (TNC) joined forces with KJ as part of the *Martu Living Deserts Project* or *Warrarnpa Kana* in Martu *wangka* (language).

BHP Billiton Iron Ore operates some of the world's largest iron ore mines in the Pilbara to the west of Martu lands and invests significantly in local communities. They continue to be the principal corporate supporter of the Project.

The Nature Conservancy is one of the world's leading conservation organisations working to protect ecologically important lands and waters for nature and people. TNC addresses the most pressing conservation threats at the largest scale in a non-confrontational and pragmatic style. In the *Martu Living Deserts Project*, TNC acts as the high level project manager providing conservation science and sustainable finance expertise for the project.

Ecological values

Australia's arid interior is one of the largest continuous areas of arid ecosystems in the world and is the most intact (Sanderson et al. 2002). The Martu native title determination area (NTDA) occurs in the middle of the largest intact arid landscape in the world and is one of the largest individual landholdings in this region. While many of Australia's aridlands have suffered significantly over the last 200 years, Martu lands remain largely intact. The Martu NTDA contains important populations of a number of species that are considered threatened in Australia and internationally, including the Greater Bilby *Macrotis lagotis*, Black-flanked Rock-wallaby *Petrogale lateralis*, Northern Marsupial Mole *Notoryctes caurinus* and Crest-tailed Mulgara *Dasycercus cristicauda.*

There are a high number of arid zone reptiles in the bioregions intersected by the Martu NTDA, particularly skinks (genera *Ctenotus* and *Lerista*). Significantly, Lake Disappointment, which is within the Martu NTDA, is home to two vertebrate species found nowhere else on Earth. The Lake Disappointment Ground Gecko *Diplodactylus fulleri* and Lake Disappointment Dragon *Ctenophorus nguyarna* are only known from low samphire shrubs fringing Lake Disappointment, foraging on bare salt crust between shrubs.

In addition, other features, such as Lake Disappointment itself, which is a nationally significant wetland, are recognised for their geomorphology, waterbird and other values[1], while other assets such as the Percival Lakes and Lake Auld have been identified as having bioregional significance (Kendrick 2001).

Martu values identified for their country

Through the Healthy Country Planning[2] process, the project identified the values that Martu people want to protect on their lands:

- Martu traditional cultural and ecological knowledge
- Martu having livelihoods based on their country and knowledge
- cultural sites
- threatened fauna such as small mammals
- waterholes and other water sources
- salt lake systems and claypans
- bush tucker traditionally harvested by Martu

Threats to those values

Though largely intact on Martu lands, the identified values are negatively impacted by a number of significant threats including:

- feral herbivores such as camels and donkeys
- altered fire regimes dominated by large hot summer wildfires
- unauthorised tourist visitation
- inappropriate development impacting on cultural and other values
- knowledge not being transferred to younger generations
- feral predators such as cats
- invasive weeds such as Buffel Grass
- new unplanned roads
- Martu no longer living on country
- climate change

[1] Listed in the Directory of Important Wetlands in Australia

[2] Healthy Country Planning is a methodology adapted from The Nature Conservancy's Conservation Action Planning (CAP) tool, specifically with the needs of Indigenous people in mind.

The partners in the *Martu Living Deserts Project* are working together to support Martu communities and help them achieve their aspirations to look after their country (by mitigating these identified threats) in balance with sustainable economic development.

Through the Project the Martu men's and women's ranger teams:

- manage feral herbivores and predators
- conduct cool season burns that are smaller and less intense than hot summer wild fires and result in a more diverse range of habitats for threatened species
- clean waterholes
- protect threatened species like the Greater Bilby and the Black-flanked Rock-wallaby (including a population translocated in cooperation with the Western Australian Department of Parks and Wildlife)
- engage tourists by checking permits and giving presentations at major camping sites on the Canning Stock Route

Results

Environmental - So far more than 26,000 camels and 2,000 donkeys have been removed from Martu lands as part of the Project. The population densities of these destructive introduced herbivores has fallen demonstrably and resulted in improved habitat for native species especially around waterholes.

The area baited for feral cats has increased to 40,000 hectares. This is keeping down the numbers of this key introduced predator of young rock-wallabies and resulting in the ongoing success of the original and translocated rock-wallaby populations.

Cool season burning now accounts for around 170,000 hectares per annum. The Project aims to explore the potential of aridland burning as a form of carbon farming to build future sources of income for the Project, based on successful models in northern Australia (Walton and Fitzsimons (2015).

More than 70 waterholes have been cleaned. In combination with the control of camels, this has resulted in a sustained supply of high quality drinking water for the benefit of native wildlife. The waterhole database contains 1,118 records with 441 of these waterholes including recorded GPS points, many mapped with the aid of helicopters.

Social and Economic – Over the last five years almost 350 Martu have been employed by KJ making them the biggest employer of Martu people. Research by Social Ventures Australia[3] has demonstrated that over the last five years KJ's on-country programs, including the *Martu Living Deserts Project*, have delivered a wide range of positive social, economic and cultural outcomes. They estimated this value to be $55 million over five financial years (FY10 – FY14) from a $20 million investment: a Social Return on Investment (SROI) ratio of 3:1. That is, for every $1 invested, approximately $3 of social, economic and cultural value was created. Martu people are the primary beneficiaries of this value. The Australian and Western Australian Governments also benefit through reductions in justice and welfare costs.

The future

The *Martu Living Deserts Project* remains in its developmental phase. Consultation with and between Martu people over the potential for an Indigenous Protected Area over all or part of their lands continue. Plans for the long-term funding of the project are also ongoing with the support of all the partners involved.

[3] available from the SVA website: www.socialventures.com.au

Ultimate success for the Project will be determined far into the future when generations of Martu to come will be able to enjoy the environmental, economic, social, cultural and spiritual benefits their country brings to them and all the people of Australia.

For the present and near-term, the positive improvements in the health of the country and the people encourages everyone involved to keep working hard to maintain and strengthen the Project for the benefit of all.

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