

5. Managing Country

Introduction

This section relates to the conservation of the reserve's cultural and natural resources. To the reserve's Traditional Owners, their culture, the land and its wildlife are fundamentally connected. They are keen to share their extensive knowledge of the land with the Parks and Wildlife Service and see it used in managing the reserve.

The Devil's Marbles is a relatively small area and represents only 0.03% of the Davenport-Murchison Bioregion. The Davenport Ranges National Park located in the same bioregion is a considerably larger reserve that is more important and more viable in terms of land and wildlife conservation. The Devil's Marbles Conservation Reserve is surrounded by Aboriginal-owned land with similar title to that of the reserve. This presents an opportunity for the value of the reserve for wildlife conservation to be enhanced in the future through cooperative conservation programs extending beyond the reserve's boundaries. Proposals such as this may be considered by the partners during the life of this Plan.



Karlu Karlu Joint Management Planning for Country. Photo: Steve Nicholson.

Principles for Managing Country

The joint management partners of Karlu Karlu recognise:

- The reserve is part of an ancient and dynamic landscape and ecosystem.
- Natural systems and processes operating within it should be protected.
- Customary responsibilities and observances of Traditional Owners are important in managing landscape and ecology.
- Both indigenous ecological knowledge and scientific approaches are important for understanding the land.
- Unnatural soil erosion, introduced plants and animals, and visitor activity can threaten the values of the reserve.
- The management of sites of cultural significance and culturally related knowledge is primarily the responsibility of Traditional Owners.
- The use of the reserve for customary activities is very important to the Traditional Owners. It is important these are accommodated wherever possible.
- Fire has been used to manage the area since Wirnkarra or creation time. Careful fire management will help maintain the reserve's values.
- Traditional Owners will be recognised as the owners of cultural intellectual property and will control the use of cultural information.

Scenic Character, Landscape, Geology, Soils and Water

Our Aim

- To maintain the reserve's natural, scenic landscape.

Background

For the general community, the character and appeal of the Devil's Marbles Conservation Reserve lies with the spectacular landscape presented by the large rounded boulders. The reserve is located in a broad, shallow valley and protects several expanses of giant granite outcrops. The area is listed on the Register of the National Estate for its geological values. The boulders are particularly spectacular when the light of the morning and evening sun highlights their deep red colour.

There are two versions of the origin of the giant boulders. To Traditional Owners, Karlu Karlu and the surrounding landscape was created by the Arrange (Devil Man) who travelled through the area forming the rounded boulders.

To scientists, the boulders are the remnants of a solid mass of coarse-grained granite formed deep within the Earth's surface about 1640 million years ago, that has gradually eroded to form the rounded boulders.

The Devil's Marbles are unusual by virtue of their size, arrangement and shape. Many of the boulders are 11 or 12 metres high. Some lie in orderly arrangements while others are precariously perched on other boulders or rock platforms. Some stand in pairs. A few are dramatically split in two. In the past, deposits of red and yellow ochre were collected for ceremonial use. Wolframite (a tungsten-bearing mineral) was once mined within the area now reserved.

The boulders can be irreparably damaged by graffiti, as it is very difficult to remove graffiti without damaging the oxide surface of the boulders. Community awareness and prompt removal of graffiti by benign means are the key management methods. Following a program of remediation there was a dramatic decrease in graffiti in the mid 1990s and graffiti has since been only an occasional occurrence.

The soils of the reserve are predominately shallow granitic sands and gravels, the product of the eroded boulders. They form a slightly richer and more stable soil than is usual in the region. A series of low ranges contain the reserve within a single catchment. The gently undulating valley floor, which surrounds the giant boulders, is shallowly dissected by numerous intermittent stream channels which cross the reserve and drain slowly in a north westerly direction.

There are limited opportunities for groundwater supply and no permanent surface water. After periods of rain the reserve contains small waterholes along the creek beds. The channels, waterholes and soaks within the reserve remain in good condition.

Management Directions

5.1 Scenery – The natural character of the reserve will be protected. Any development will be carefully sited and designed to be in harmony with the natural environment, views and significant sites, so as not to detract from the reserve's landscape and scenic values.

5.2 Boulders – Any work to repair unnatural disturbance to the boulders, such as graffiti will be subject to approval by the Traditional Owners to ensure cultural protocols are observed.

- 5.3 Soil, Gravel Extraction or Landscape Disturbance** – Soil or gravel may only be removed or disturbed with the approval of the joint management partners and in accordance with the conditions of a permit.
- 5.4 Soil Erosion** – Infrastructure and facilities will be sited to avoid areas susceptible to erosion and will be undertaken with a minimum of soil disturbance. All management activities will aim to minimise disturbance to the reserve's soils.
- 5.5 Sewage** – Any toilet systems installed in the reserve will be of a design that minimises risk of groundwater contamination.
- 5.6 Graffiti** – Community education and visitor interpretation will reinforce the significance of Karlu Karlu to encourage respect for the site. Graffiti will be removed as quickly as possible using methods that do not permanently damage the rocks.

'what is lying on the ground ... don't touch ... not to touch' Kirda and Kurdungurlu



Photo: Tourism NT

Areas of Cultural Significance and Aboriginal Land Use

Our Aims

- To ensure significant sites are protected.
- To ensure cultural obligations under customary law are not impeded.
- To improve access to areas of cultural significance for Traditional Owners.

Background

Areas of Cultural Significance

What is nowadays the main visitor area was known by Traditional Owners as a dangerous place, visited only by senior Traditional Owners with special responsibilities. With the passing of time and the proximity of the Stuart Highway, Traditional Owners now accept visitor activity in this area. They say, "it's a little bit open now", but wish that visitors acknowledge the importance of the area and respect the site.

Large areas of the reserve have special cultural significance. According to Aboriginal law, Traditional Owners have responsibility to look after the country. This may include the performance of ceremonies and visits to important sites to ensure everything is in its right place. Cultural traditions require Kirda and Kurdungurlu to fulfil these responsibilities to 'look after the country'.

Most of the reserve is a registered sacred site under the *Northern Territory Sacred Sites Act*.

Sites represent only part of a broader picture of a complex landscape of spiritual significance.

While there are deeper levels of knowledge applying to these areas, cultural information that can be shared publicly provides some insight into the worldview of Traditional Owners and reinforces the importance of this country to them. Some sites pose spiritual danger to people, and custodians feel a heavy responsibility to ensure observance of rules that keep such forces in check. Visitors ignoring these concerns cause them alarm and distress.

The reserve contains rock carvings and archaeological materials that testify to a long history of use and occupation. These ancient cultural resources are highly significant to Traditional Owners and the wider community.

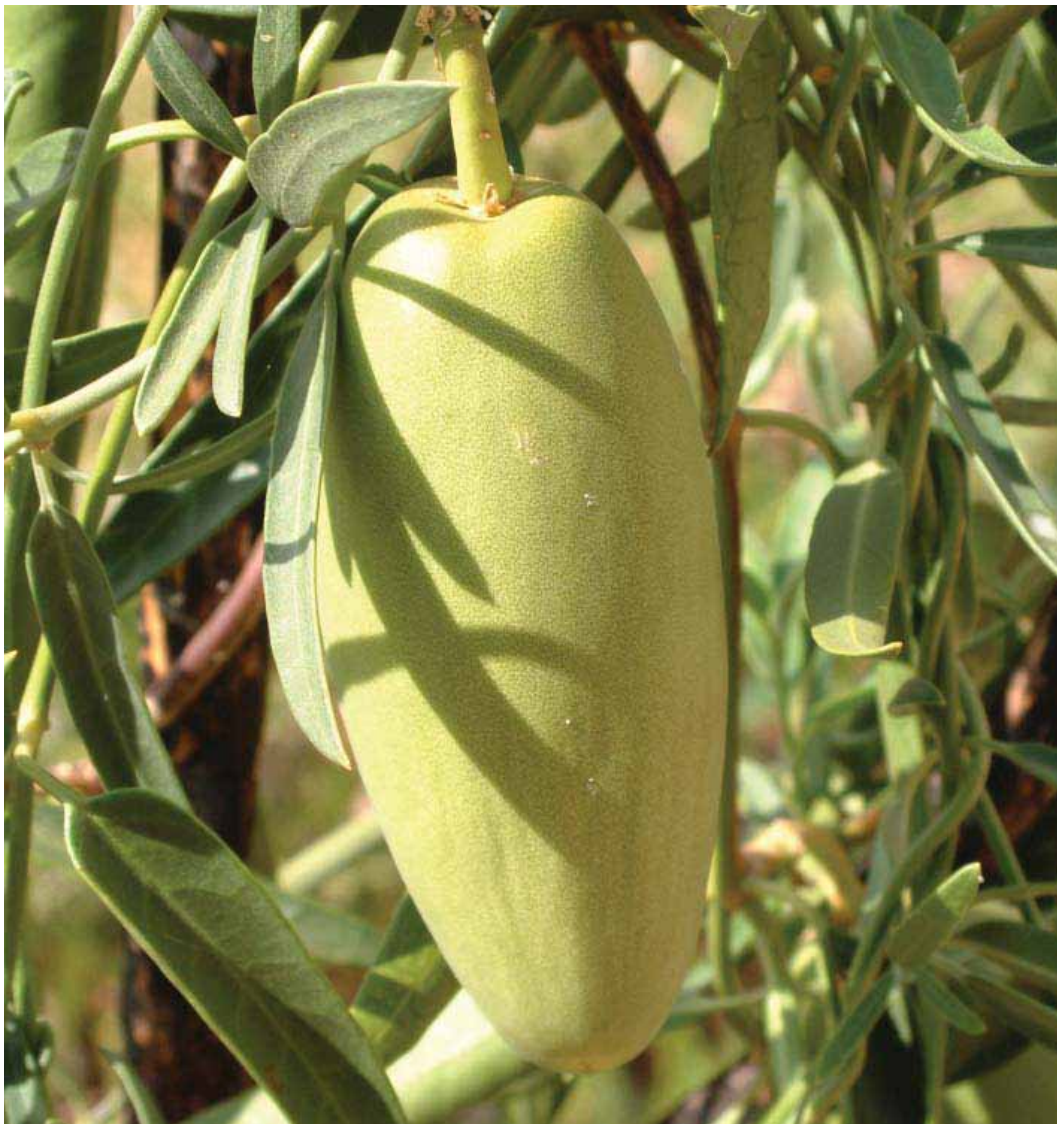
It is of paramount importance to Traditional Owners that the boulders of Karlu Karlu, other significant places, rock carvings and archaeological material within the reserve are protected. It is also critical that the appropriate Traditional Owners have control and management of these sites and resources. The Parks and Wildlife Service will do its best to accommodate Traditional Owners' aspirations to fulfil their cultural obligations under customary law.

Public knowledge promotes appreciation and respect for this aspect of the reserve and reduces the risk of unintentional damage to significant areas. However, secret and sacred cultural knowledge will not be available for public information. The Traditional Owners request that the public respects this fact.

Aboriginal Land Use

Past traditional land use in the reserve involved hunting and gathering activities. In recent years, Traditional Owners have not accessed the reserve as it was seen as a reserve and a place where they were not allowed to go. With the return of land title and the beginning of joint management, the Traditional Owners would like to access the central area of the reserve so they can take their families out to pass on knowledge about culture and country. They also consider it very important to conduct ceremonial activities on the reserve. Access for this purpose remains difficult due to the rough terrain. It is unlikely that ceremonial activity will affect visitors.

Under the *Territory Parks and Wildlife Conservation Act*, Traditional Owners have the right to hunt wildlife and gather bush foods. Due to its size and the proximity of visitors, Traditional Owners believe that hunting is inappropriate within the reserve and choose not to exercise that right. They remain interested in gathering bush foods and medicines on the reserve from time to time.



Local bush tucker, Bush Banana (Leichhardtia australis). Photo: Barritt and May.

Management Directions

- 5.7 Culturally Sensitive Areas** – The Parks and Wildlife Service will support Traditional Owners' wishes to restrict visitor access to culturally sensitive sites or areas on the reserve, as directed by them. Traditional Owners ask that a large native fig (*Ficus brachypoda*) in the visitor area is protected from all forms of visitor activity or disturbance and that this site is not filmed or photographed.
- 5.8 Cultural Business** – Traditional Owners' authority in respect to all cultural matters will be respected.
- 5.9 Ceremony** – Parts of the reserve may be temporarily closed from time to time to allow Traditional Owners to conduct ceremony. Sufficient notice will be given to the public if necessary.
- 5.10 Heritage Protection** – On the advice of Traditional Owners, significant areas, rock engravings and archaeological material will be recorded and afforded appropriate protection.
- 5.11 Community Education** – An understanding of, and respect for Karlu Karlu as a place of high cultural importance will be promoted to visitors by the joint management partners.
- 5.12 Staff Awareness** – If Parks and Wildlife Service staff are required to access culturally sensitive areas (refer Zoning 3.1 and 3.3), senior Traditional Owners may supervise access and will advise on appropriate behaviour.
- 5.13 Public Interpretation** – The Traditional Owners' public creation stories may be interpreted to visitors so they may gain an understanding and respect for the traditional cultures associated with Karlu Karlu.
- 5.14 Consultation** – All heritage protection measures, culturally related public interpretation or any developments proposed for Aboriginal sites will be subject to approval by the Traditional Owners. A formal site clearance by the CLC will be required for any proposed works.
- 5.15 Traditional Gathering** – Rights in relation to harvest of plant materials from the reserve for traditional purposes will extend only to Traditional Owners. Gathering of plant foods and materials by others will require the approval of the Joint Management Committee.
- 5.16 Management Access Track** – Subject to cost and available funds, a four-wheel drive management track will be established to access the central portion of the reserve for land management and cultural purposes.

'The country here used for ceremony ... only the right people went there ... Kirda and Kurdungurlu.

'Old ladies would dig for yams in the back area ... important to go there now to get medicine and bush tucker ... white ochre ... still today we teach young boy and women' Kirda and Kurdungurlu

Indigenous and Historical Knowledge

Our Aims

- To ensure Traditional Owners retain control of their ecological knowledge and sites in relation to the reserve.
- To foster the transfer of indigenous and historical knowledge from old to young people in relation to the reserve.

Background

Indigenous and historical knowledge encompasses Traditional Owners' ecological knowledge, oral histories of times before and after European settlement, and knowledge relating to the Dreamtime or creation stories. Traditional Owners are concerned about this knowledge being lost and it is vital to them that it is passed on to succeeding generations. They want their young people to learn about looking after country and the use and significance of plants and animals. They will require access to the reserve for this purpose. Traditional Owners also would like to share information with rangers they believe will help with park management, for example the traditional use of fire.

While Traditional Owners are protective of their traditional knowledge they are keen to share some knowledge with visitors through interpretive programs, particularly about bush tucker and medicines in the reserve. Historical events, such as the story about John Flynn's gravestone, may also be included in interpretive programs. This relates to the fact that a sacred boulder was taken from the area in 1953 to mark John Flynn's grave near Alice Springs and was returned to its original location in 1999.

Management Directions

- 5.17 Inter-Generational Transfer** – Joint management programs will provide opportunities for Traditional Owners to foster the transfer of traditional knowledge between generations.
- 5.18 Oral Histories** – Where appropriate, oral histories will be recorded and included in interpretive programs.
- 5.19 Indigenous Ecological Knowledge** – Indigenous ecological knowledge will be documented by the joint management partners for the benefit of both local Aboriginal people and visitors.
- 5.20 Protecting Intellectual Property** – The intellectual property rights of Traditional Owners will be protected. The recording, storage and use of cultural information will be consistent with the directions of Traditional Owners through the Joint Management Committee and with policy established for this purpose.
- 5.21 Historical Remains** – The remnants of Tungsten mining, World War Two depots and the Overland Telegraph Line will not be disturbed by development or management activity without appropriate heritage clearance.

'We would hunt in the flat away from the rocks ... only right people would go ... those old people ... sacred site you know'

Some places we need to look after ...that old man he knows everything...what all sites protected.

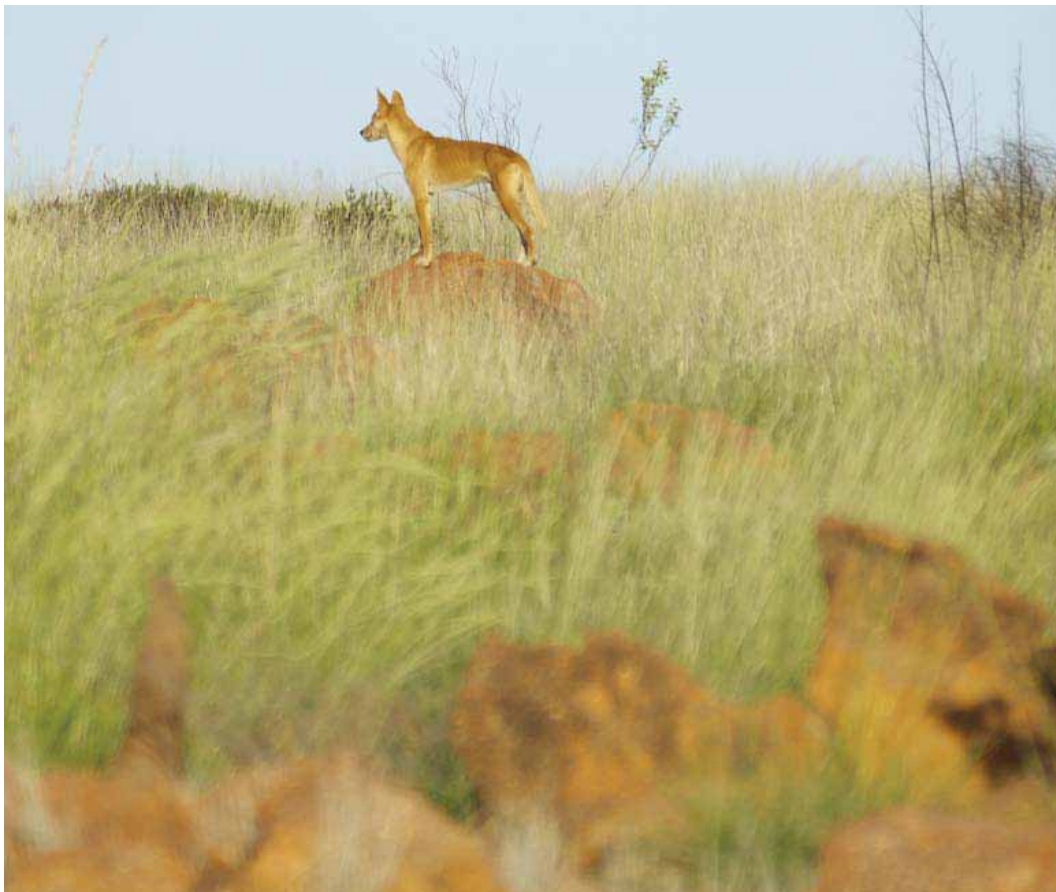
'Our histories they didn't learn in schools ... only when we go home ... old people would tell us by writing it on the ground.'

'We are worried about losing country and ceremony and all that ... young ones don't know ... we worried they don't know the stories ... after we go ... they're the ones to know ... we need to teach them'

'Sacred things and all that ... not for anyone else ... it's important ... keep the family knowledge in the circle ... in the family circle.'

'The story has to be there ... the ceremony things ... the business way ... we the ones that got to get them (young people) and teach them about our culture way'

Kirda and Kurdungurlu



Dingo. Photo: Jason Barneston

Native Plants and Animals

Our Aims

- To maintain a natural landscape with a focus on protection of the scenic and cultural values of the visitor zone.
- To maintain indigenous ecological knowledge.

Background

Devil's Marbles Conservation Reserve lies within the Davenport-Murchison Bioregion, bordering the Tanami Bioregion and is situated between the subtropics and the arid zone. Approximately 2% of the Davenport-Murchison Bioregion is conserved within National Parks or Reserves. The Devil's Marbles only contributes to 0.03% of the total Bioregion and is home to a relatively small range of species typical of the area. In the context of the Northern Territory reserve system it makes a minor contribution to biodiversity conservation.

The small area of the Devil's Marbles Conservation Reserve means that its conservation management in isolation is not viable over the longer term. If however the reserve was part of a much larger area managed for conservation, such as an Indigenous Protected Area (IPA) on adjacent Aboriginal lands, management for biodiversity conservation could be effective.

Approximately 116 plant species (including seven introduced species) have been observed within the reserve and no rare or endangered species have been recorded. The vegetation of the reserve can be broadly described as consisting of three plant communities:

- Spinifex rocky ridges and gravelly hill rises (*Triodia spicata*, *T. epactia*, *T. intermedia* (and possibly *T. pungens*) with a scattered overstorey of trees and shrubs; including snappy gums (*Eucalyptus leucophloia*), *Acacia* species and bloodwoods (*Corymbia odontocarpa*) which mainly lie within drainage lines.
- Mixed shrubs (*Acacia cuthbertsonii*, *A. adsurgens*) and spinifex (*Triodia bitextura*, *T. longiceps* and *T. pungens*) on open sandy flats and drainage depressions.
- Vegetation surrounding the granite boulders (marbles); poorly defined but influenced by soil differences and water drainage.

The reserve includes the home ranges of several widespread species whose conservation is unlikely to be affected by any direct management activity in the reserve. In summary, the recorded fauna of the reserve comprises:

- Eighty three bird species.
- Ten species of native mammal including two bats, one dasyurid, two macropods, two rodents and 1 canid (dingo).
- One monotreme (echidna).
- Thirty species of reptiles, including twenty seven species of lizard and three species of snake.
- Four frog species.
- One crustacean (drought-surviving crab *Holthuisiana transversa*).

The eastern portion of the reserve and the broader area continues to be a significant area to Traditional Owners for bush tucker and traditional medicine. They maintain traditional knowledge of the area including foods, medicines, fire, tobacco, tools, artefacts, adhesives, ornaments, ceremonial decorations and water sources. The native fig (*Ficus brachypoda*) found within Karlu Karlu—*tywerrke* in Kaytetye and Alyawarra, and *witjiji* in Warlpiri and Warumungu—is particularly significant to female Traditional Owners.

Traditional Owners are very concerned about the apparent reduction in some species and the absence of others that once inhabited the area. They are keen to be involved in any aspect of wildlife management on the reserve and have expressed a desire to get out on the reserve to share and pass on to young people knowledge of country.

Harvesting bush tucker and plant materials is a right enjoyed by Traditional Owners. There is considerable potential for bush tucker tours to be run on the reserve although concentrated collection may damage vegetation in some areas.

Management Directions

5.22 Wildlife Survey and Monitoring – Wildlife survey and monitoring will be a lower priority for the reserve in relation to conservation management. However, such activities are valuable opportunities for knowledge exchange between the partners and younger Traditional Owners and may be carried out from time to time for this purpose.

5.23 Information Management – New plant and animal records will be recorded in appropriate Parks and Wildlife Service biophysical datasets.

5.24 Bush Tucker Tours – Bush tucker tours or tourist activities that inform and educate tourists about traditional uses of plants will be encouraged. Native vegetation will not be damaged as a result of any such activity.

5.25 Traditional Use of Resources – Traditional Owners will harvest bush tucker and plants within the reserve for customary use. If necessary, the impact of harvest will be monitored and managed to lessen impact. For safety reasons, Traditional Owners will not hunt with firearms within the reserve.

5.26 Firewood – To protect the sparse vegetation of the reserve, firewood collection will be prohibited within the reserve.

'Too much bush tucker names ... they want to know them animal name ... teach them kids ... teach them name ... same tree different name ... everything name. Old people ... young people can work together with rangers ... two-way he can learn.'

'Old people use to tend to these areas. Yapa (Aboriginal people) don't do that anymore and the animals have gone away. But if they see us (Traditional Owners) those animals will come back ... If we sing ... they will come (wildlife).'

'Kwarlp (Hare wallaby) gone, Wamper (Possum) gone, Atyelp (Quoll) gone. We have ceremony for these animals.'

'We know the stories for all those animals which are gone... those extinct ones ... they're still there we still have stories for those animals ... they're still alive ... somewhere'

'Spend time there ... ceremonies ... some plants and animals will come back. If they see us they will come back.'

'It's OK for White-fellas to separate (biodiversity) but we don't separate.'

Kirda and Kurdungurlu



Drought surviving crab (Holthuisiana transversa). Photo: Central Land Council.

Introduced Plants and Animals

Our Aims

- To maintain a natural landscape with a focus on protection of the scenic and cultural values of the visitor zone.

Background

Weeds and feral animals pose a risk to the reserve's biodiversity and its scenic and cultural values. As discussed above, the value of the reserve for biodiversity conservation is relatively low. Although weeds and feral animals make an impact on the reserve's biodiversity values, efforts to manage them at the reserve scale would represent relatively poor investment of available resources. Weeds and feral animal management in the reserve should therefore focus on minimising their impacts on visitor (aesthetic) and cultural values within the visitor areas.

Weeds are mainly restricted to visitor areas and many parts of the reserve remain relatively weed free. Weeds of concern include buffel grass (*Cenchrus ciliaris*), red natal grass (*Melinis repens*) and feather top rhodes grass (*Chloris virgata*). Traditional Owners have expressed concerns about weeds and their effect on reducing the availability of some types of bush tucker, particularly yams, bush onions and bush tomato, and are keen to be more involved in vegetation management programs.

Four introduced vertebrate species are known to inhabit Karlu Karlu: the feral horse (*Equus caballus*), feral cattle (*Bos Taurus*), feral cat (*Felis catus*) and house mouse (*Mus domesticus*).

There is little evidence of impact from cattle and feral horses on the visitor area. The reserve will remain unfenced from neighbouring Aboriginal lands, which are owned and managed by Traditional Owners with responsibilities for Karlu Karlu.

Management Directions

5.27 Weed Management Program – Weed control will focus on the visitor area. The program will be reviewed by the Joint Management Committee each year. Management will pay particular attention to:

- The impact of weeds on the reserve's aesthetic values.
- Regional priorities, cost/benefits and available resources.
- Practical weed control methods.
- Traditional Owners cultural concerns.
- Employment of Traditional Owners.
- Managing risks of weeds spreading through movement of soil.
- Synergies with other management programs.

5.28 Feral Animal Management Program – Feral animal management will focus on protecting the visitor area. Programs will be reviewed by the Joint Management Committee each year. Management will pay particular attention to:

- Regional priorities, cost/benefits and available resources.
- Practical and humane feral animal control methods.

- Traditional Owners cultural concerns.
- Employment of Traditional Owners.
- Visitor safety.
- Liaising with neighbours.
- Synergies with other management programs.

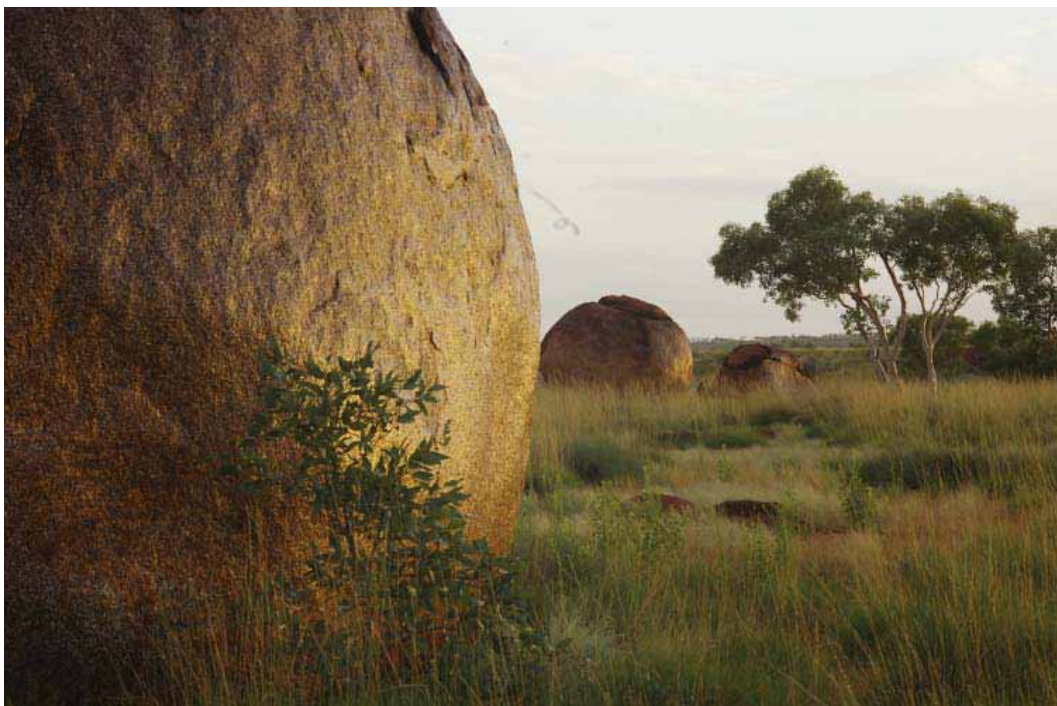
5.29 Information Management – Weed and feral animal observations and treatments will be recorded in Parks and Wildlife Service biophysical datasets.

5.30 Pets – Visitors may bring dogs into the car park area of the reserve. In all other circumstances, animals can only be brought into the reserve with an approved permit issued by the Parks and Wildlife Service.

'We can see these animals ... these belong to this country ... but horse, donkey, camel ... (they're) strangers ... before camel and all these other animals come along there was plenty animals'.

This plant (Buffel grass) ... roots still there after burn ... it's a problem.'

Kirda and Kurdungurlu



The Devils Marbles. Photo: Jason Barnetson

Fire

Our Aims

- To protect people, property and sacred sites from wildfire.
- To maintain a natural landscape with a focus on protection of the scenic and cultural values of the visitor zone.
- To incorporate indigenous ecological knowledge into fire management.

Background

Fire has always been a part of Karlu Karlu's landscape and has shaped the area's ecology. Failure to manage the high risk of wildfire exposes people, physical assets, personal property and sacred sites to danger and damage.

Most of the reserve's vegetation and habitats have evolved with, and are relatively tolerant of frequent fire. Some vegetation growing around the large granite boulders, such as the native fig are however, both culturally valuable and sensitive to fire.

Fire has been managed on the reserve program for many years, focussing on firebreaks and fuel reduction around the main visitor area to protect infrastructure and reduce risk to visitors. Given the reserve's small size and relatively low biodiversity value, managing fire at a larger scale across the reserve is difficult to justify on the basis of conservation outcomes. Broad-scale efforts may be justified in collaboration with neighbouring landholders from time to time.

Since creation time, Traditional Owners have used fire as a tool in managing habitat, creating access through country, and for hunting and ceremonial purposes. By and large Aboriginal burning resulted in a patchwork of vegetation communities at different stages of recovery. Large wildfires were few and habitat diversity was promoted. Traditional Owners retain their traditional knowledge of fire and its use in the landscape. Both Kirda and Kurdungurlu are responsible for burning. Country was burnt just before the wet season to assist plant germination when rain fell and to clear areas for hunting. Pastoral land use and the movement of Aboriginal people to government settlements had a dramatic effect on the landscape leading to larger and more intense wildfires, more uniform regeneration stages and lower diversity of habitats.

Traditional Owners are keen to be involved in all aspects of fire management and have their interests and approaches incorporated into reserve management programs.

Management Directions

5.31 Fire Management Program – Fire management will focus on the visitor zone with priority given to maintaining firebreaks and/or keeping fuel loads low to protect culturally significant trees, visitors and their property, park infrastructure and maintaining the reserve's natural aesthetics. From time to time consideration may be given to broader scale prescribed burning and fire control subject to resource availability and well-justified scientifically and culturally-based outcomes in collaboration with surrounding landholders. The Joint Management Committee will review programs each year. Management will pay particular attention to:

- Regional priorities, cost/benefits and available resources.
- Maintaining boundary firebreaks and reducing fuel loads around park infrastructure.
- Traditional Owners' cultural interests.

- Employing Traditional Owners.
- Visitor safety.
- Liaising with neighbours.
- Synergies with other management programs.

5.32 Information Management – When such data may be useful for fire management planning purposes, fires will be recorded in appropriate Parks and Wildlife Service biophysical datasets.

5.33 Wildfire Suppression – Wildfires threatening the reserve will be reported to the Bushfires Council and will be suppressed where visitor and asset protection are threatened.

5.34 Camp Fires – Visitors will be permitted to have fires only in fireplaces provided.

‘Protect them dreamtime tree from bushfires ... old people would tell us not to touch those trees’

‘When we burnt ... all through the season ... old people burnt in patches ... only at the right time to burn ... not when strong winds ... might be big time dreamtime tree that side’.

‘Early days ... clean ‘em round (the trees) ... so fire doesn’t jump over ... especially protect them areas ... only burn small patches or all get burnt. So can come back new grass ... and come back again’

‘We burn ... when big rain comes ... so get big bush tucker. So burn just before the rain, when everything dry ... so when rains come plenty bush tucker, wild bananas ... little seeds ... tucker ... grass. Not a big wind time ... summer time best time ... December.’

‘Old people can teach them how to burn ... young people and CDEP ... and make sure we protect them dreamtime trees ... and teach rangers how to burn.’

Kirda and Kurdungurlu