

# **Nitmiluk National Park**



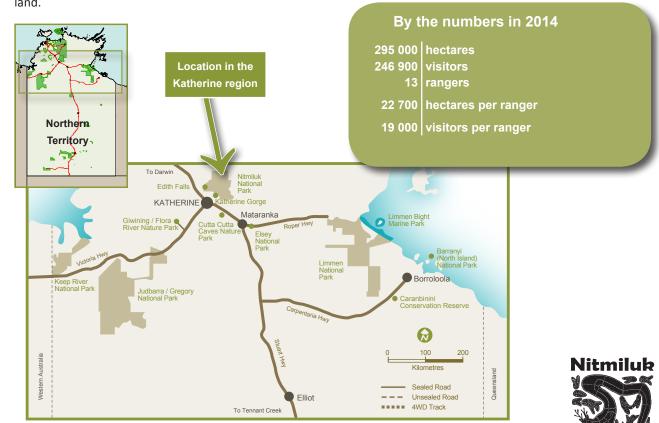


### About the park

Nitmiluk National Park, a 30 km drive north-east of Katherine, includes the spectacular Nitmiluk Gorge, the popular Edith Falls Plunge Pool at Leliyn and the internationally renowned Jatbula Trail. In 2014 a total of 246 900 visitors enjoyed the park, taking the opportunity to go canoeing, swim, walk or experience the gorge by tour boat or scenic flights.

Owned by the Jawoyn Aboriginal people, the park has been jointly managed with the Parks and Wildlife Commission (PWCNT) through the Nitmiluk (Katherine Gorge) National Park Board since 1989. The park has many sacred places of great significance to the Jawoyn people and they maintain a close connection with this land. The 295 000 hectare park protects a diversity of landscapes and habitats of international conservation significance. The Arnhem Plateau, which extends across much of the park, is listed as a threatened ecological community under Commonwealth legislation.

NT parks and reserves have been assessed and classified for their visitor and biodiversity values. Nitmiluk National Park is rated as one of the Territory's most valuable parks and is classified as a Class 1 Visitor park and a Class 1 Biodiversity park.



# The most significant changes in the past 2 years

- Created unobstructed views of Edith Falls and the Plunge Pool and improved visitor experience by installing a pedestrian bridge and realigning the Leliyn Loop Walk.
- Enhanced knowledge of the vulnerable Gouldian finch through a survey of the hills around Leliyn in 2013 as part of ongoing monitoring. Significantly fewer finches were counted at waterholes than at any other time since the year 2000. The floods in late 2011 affected vegetation at surveyed waterholes, subsequently affecting the number of finches.
- Restarted aerial control of feral animals in 2012 after 2 years without an aerial program, leading to fewer feral animals and less damage to natural habitats.
- Registered a sacred site at Leliyn through the Aboriginal Areas Protection Authority.
- Increased strategic burning, which has reduced the incidence of wildfires and the damage they cause, improving diversity of vegetation.

# The most important actions in the next 2 years

- Improve knowledge of the park by conducting 5-yearly flora and fauna surveys, starting in 2015, with scientists from other agencies.
- Introduce an online campsite booking system and develop tour operator campsites along the Jatbula Trail.
- Reinstate the visitor information officer position at the Nitmiluk Visitor Centre.
- Realign the Southern Walks to provide visitors with numerous loop walk options and additional observation points above the gorge.
- Implement the integrated conservation strategy for the park.
- Develop a visitor experience development plan for the park.
- Develop a cultural heritage management plan in collaboration with the Jawoyn Traditional Owners.

How	to	interpre	et our	tables

Situation		
	Great with no need to improve	
	Acceptable with room to improve	
	Unacceptable with improvement needed	
	Critical with improvement urgent	

Trend	
<b>^</b>	Improving
<b>←</b> →	Stable / No change
¥	Declining
N/A	Not rated / Not applicable
$\checkmark$	Occurred / In place
×	Did not occur / Not in place
?	Unknown



### Planning for the park

The Nitmiluk (Katherine Gorge) National Park Board provides strategic direction. The board met four times in 2013–14. Increased involvement of rangers in board meetings from late 2014 will improve communication between the board and rangers, particularly in relation to board decisions and rangers' work.

A new plan of management was tabled in the Northern Territory Legislative Assembly and became operational in October 2014.

An integrated conservation strategy is being developed for the park. The strategy will set clear goals and actions to reduce threat levels over a five year period. It will set out a systematic approach to monitoring the impact of efforts to reduce the impact of fire, feral animals and weeds, and in turn the impact on the health of the flora and fauna in the park. The strategy will be the basis of future report cards.

Rangers use annual operational action plans to assist them to manage fires, weeds and feral animals and to support visitor enjoyment of the park.

It is a priority to prepare a 5 year Visitor Experience Development Plan to direct development and enhance the visitor experience.

Joint Management and planning at a glance	
Governance, planning and decision-making processes are in place	~
Effectiveness of the joint management processes	↔

### Managing for visitor safety and enjoyment

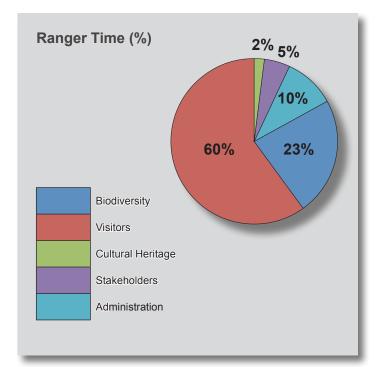
Nitmiluk National Park is one of the most important tourism parks in the Northern Territory and is the single most-visited tourist attraction in the Katherine region. Over the past 2 years the average number of annual visitors to Nitmiluk National Park has been 243 000.

Visitor surveys in 2013 in March (off peak season), June/July (peak season) and September/October (shoulder season) showed that visitor satisfaction is high: 88% of respondents were satisfied or very satisfied with their experience.

The Baruwei Lookout Walk, the Nitmiluk Visitor Centre and swimming in the Edith Falls Plunge Pool are the most popular visitor activities. Surveys reveal that 45% are short-stay visitors (up to 4 hours) and 42% stay for at least one night in the park. This is a change from 2010 when 54% of people were shortstay visitors and 35% stayed for at least one night.

# How is ranger time invested in park programs?

In 2013–14 there were 13 full time rangers working at Nitmiluk National Park. They are responsible for managing the park, including protecting the park's biodiversity and cultural values, overseeing visitor facilities and activities and carrying out some administrative functions. The rangers also have an important role in engaging with stakeholders and working with the interests of the broader community.





### In the past 2 years almost \$500 000 worth of new work was completed including:

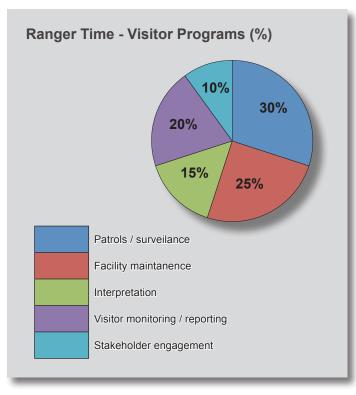
- pedestrian bridge across the Edith River at Leliyn (\$301 000)
- upgrade to Southern Walks, including a new staircase to Southern Rockhole and new signs (\$47 000)
- upgrade to Baruwei Loop Walk, including replacing steps and levelling rocky sections of path (\$150 000).

#### Work planned for the next 2 years includes:

- realignment of the Southern Walks track
- an online booking system for the Jatbula Trail
- tour operator campsites along the Jatbula Trail.

#### Visitor management at a glance

The park has an annual action plan to support visitor safety and enjoyment	$\checkmark$
The achievement of high priority actions stated in the annual visitor action plan (%)	> 90%
The capacity of the park's ranger team to manage visitor programs effectively	←→
Knowledge of visitor numbers, profiles, behaviours, expectations and satisfaction levels	←→
Change in the level of knowledge of visitors numbers, profiles, behaviours, expectations and satisfaction in the past 2 years	<b>^</b>
Estimated visitor satisfaction with access, facilities and services	↑





### Engaging with the community

The park's main stakeholders include neighbours, the tourism industry and the local community. Rangers are in regular contact with Jawoyn landholders and Kakadu National Park, particularly regarding fire planning. Informal agreements between the Jawoyn Rangers and Nitmiluk and Kakadu national parks help cooperation on firebreaks and pooling resources when wildfires threaten.

Rangers also liaise regularly with the tourism industry. Nitmiluk Tours and rangers meet regularly and work together to ensure visitor services and facilities are high quality. Rangers also work regularly with the Katherine Visitor Centre and tour companies on the status of facilities and visitor access.

A wide variety of user groups enjoy the Park and it is an important part of the local community. Information on what is happening at the park is on the PWCNT Facebook page. Community activities include:

- activities for Parks Week in March each year with ranger guided walks to waterholes and talks on various topics such as wildflowers, bushtucker and birds
- a 'recycling while on park' themed poster competition for Katherine primary school children, with the entries on show at the Nitmiluk Visitor Centre
- 'The Great Nitmiluk Toad Bust', which teaches visitors to identify cane toads and safely collect them
- Nitmiluk rangers attending the annual Katherine Show to represent and promote the park
- weekly ranger slideshows presented at the Leliyn Campground and ranger guided walks along the Baruwei Loop Walk as part of the Territory Parks Alive interpretation program (in 2013 there were 54 presentations and guided walks delivered to 1341 visitors)

• 'A Walk in the Park' program involving a half-day guided hike in the Dry season months, started in 2014 by the PWCNT's Community Engagement Officer.

Permits are required for special access and activities including functions and commercial activity, such as commercial filming. Over the past year 3 permits have been approved for weddings held in the Nitmiluk Gorge. The swimming leg of the Katherine Ultra Challenge was held at the gorge in May 2013. There were 38 commercial photography and filming permits granted in 2013. Images of the park continue to frequently feature in national and international magazines, newspapers, online and at art exhibitions. Film footage was used for the Channel 7 Sunrise program, the SBS Destination Flavour Series, and for documentaries and promotional videos and international television shows.

Engagement with the community is rated as acceptable. There is always room for improvement however, particularly communication with neighbours to the south of the park. There is sometimes the perception that all fire in the region comes from the park. This suggests rangers need to communicate with neighbours more frequently, outlining strategic fire plans and providing support when wildfires threaten neighbouring properties.

### Community and stakeholder engagement at a glance

Level of engagement and support from the community / stakeholders

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Change in the level of engagement and support from the community / stakeholders in the last two years

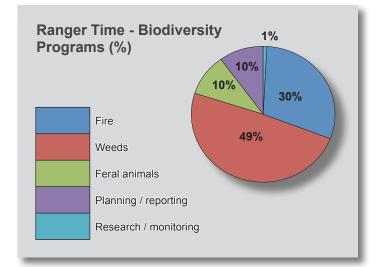


### Knowledge of the park's flora and fauna

The park's natural assets have high conservation significance. This is not just because of the complexity of the landscape, but also because of the diversity of plants and animals. The park contains sandstone escarpment and plateaus, gorges with pockets of monsoon rainforest, wooded valleys, rivers and upland wetlands.

The impact of fire on the landscape is monitored periodically. The results enable rangers to better target fire management in the park. External research organisations have conducted a number of scientific studies over the past couple of years. This includes a study on ground beetles, another on jumping spiders and a taxonomic flower and fruit research project. The vulnerable Gouldian finch was also surveyed for the first time in several years. The survey targeted one of the largest known breeding populations of the species.

Funding and materials from other sources enabled a number of programs to be expanded, including aerial burning and weed spraying. This includes funding from the Northern Territory Department of Infrastructure for burning along the park boundary and provision of chemicals from the wider PWCNT budget to spray fence-lines and around infrastructure.



### Biodiversity management at a glance

Knowledge of the park's species and communities

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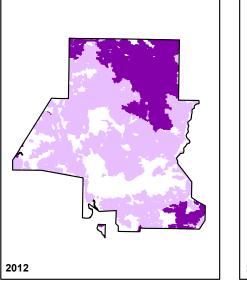
### Managing fire

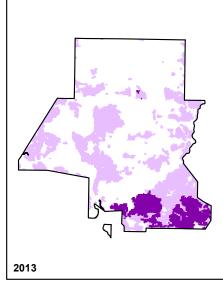
Frequent high-intensity late Dry season wildfires are the greatest threat to the park's values. Rangers have worked hard in recent years to correct the trend of large areas being burnt annually by wildfires. They have reduced the wildfire threat by actively increasing late Wet season and early Dry season burning. Rangers have also worked closely with neighbours, including the Jawoyn Rangers and Kakadu National Park. Confidence and capacity to carry out the fire program has increased. Rangers have been learning from previous years' work and liaising with fire experts based at Charles Darwin University to refine the annual fire program.

Rangers have noticed a decrease in speargrass dominance in the sandstone and upland woodlands country over the past 2 years. This signals that the fire program is on track for these ecosystems. Speargrass tends to favour regular and intense fire; yet many sandstone and upland woodland plants require 5 or more years unburnt in order to thrive. The five-yearly flora and fauna survey in 2015 will give insight into the impact of recent fire management. Rangers completed all planned aerial and on-ground early burns in 2014. Some firebreaks are not as secure as rangers would like them to be and this can be improved. Much of the park is inaccessible by vehicle; however, rangers have been working on a fire trail through the centre of the park so ground burning can be performed from vehicles in future.

Fire management at a glance	
The park has an annual action plan for fire management that directs annual fire action	✓
The achievement of high priority actions in the annual fire action plan (%)	> 90%
The capacity of the park's ranger team to manage fire programs effectively	↔
Change in team capacity to manage fire programs over the past 2 years	<b>^</b>
The level of threat to the park's biodiversity values presented by wildfire this year / now	↑

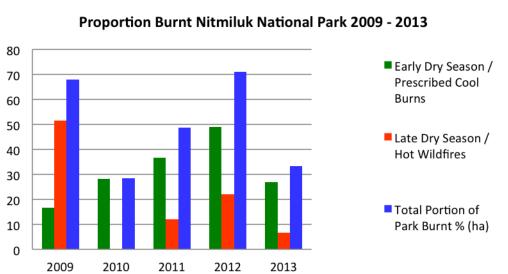
#### NITMILUK NATIONAL PARK FIRESCAR MAPPING 2012 - 2013

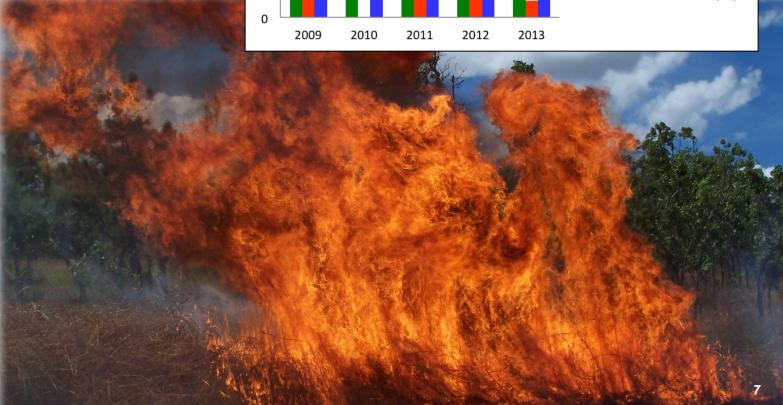




Early Dry Season Burn / Prescribed Cool Burns

Late Dry Season Burn / Hot Wildfires





### Managing weeds

Weeds are a threat at visitor sites and in disturbed areas. The species of greatest concern to the park are gamba and mission grasses. Gamba grass is becoming more prevalent in the Katherine region. Small, isolated pockets of gamba grass have been found around Leliyn in the past; however, after intensive control there have been no further recorded outbreaks since that time. Mission grass is commonly found in visitor areas and disturbed areas in the park. The grass has been steadily spreading up 17 Mile Valley and along the Jatbula Trail with outbreaks recorded at Biddlecombe Cascades and Crystal Falls.

The two grassy weed species are a serious concern because they are highly flammable and can dramatically fuel wildfires. Drying out in the late Dry season, the grasses create high fuel loads and can burn with such massive intensity that they have the ability to alter vegetation structures. Due to a short Wet season and below average rainfall in the past year, rangers have been able achieve good weed control around the primary visitor sites of Nitmiluk Gorge and Leliyn. This includes protecting infrastructure from grassy weeds.

At outlying visitor sites in the park, weed infestations are more challenging to control. Because Wet season rains cause the river to rise along the main access route, they become inaccessible, unless by air, at the most crucial time for control just before seeding. As weeds continue to spread into the park the level of threat caused by weeds appears to be increasing, although no formal surveys have been conducted. Options to further reduce the spread of weeds are being explored.

Weed management at a glance	
The park has an annual action plan for weed management that effectively directs action	$\checkmark$
The achievement of high priority actions stated in the annual weed action plan (%)	> 90%
Capacity of the park's ranger team to manage weed programs effectively	←→
Change in team capacity to manage weed programs over the past 2 years	←→
The level of threat to the park's biodiversity values presented by weeds this year / now	<b>↔</b>

### Managing feral animals

Feral animals can have a major impact on the park. Species with the greatest impact are feral cats, cane toads, buffalo, pigs, horses, donkeys and cattle. Because no formal aerial surveys have been done since 2003, knowledge of feral animal numbers and distribution is incomplete. The trend in the level of threat caused by feral animals is believed to have improved, however. Rangers have noted fewer signs of feral animals since the aerial control program resumed in 2012.

The annual action plan targets only pigs and buffalo because there are no effective means of control for feral cats or cane toads. The threat level presented by feral animals is still greater than is desirable and options to further reduce this threat are being explored. Capacity to manage feral animals has improved over the past 2 years due to the longevity of the ranger team. Staff have developed an intimate knowledge of the park and know how to best target their control efforts. More team members now have corporate firearms licences and opportunistic control has therefore increased.

### Nitmiluk National Park Report Card 2014

Feral animal management at a glance	
The park has an annual action plan for feral animal management that effectively directs action	✓
The achievement of high priority actions stated in the feral animal action plan (%)	> 90%
Capacity of the park's ranger team to manage feral animal programs effectively	<b>^</b>
Change in team capacity to manage feral animal programs over the past 2 years	<b>^</b>
The level of threat to the park's biodiversity values presented by feral animals this year / now	<b>^</b>

### Managing cultural values

The Indigenous cultural values of the park are of outstanding national significance and include many sacred sites, rock art and other archaeological sites. Years of cultural information has been gathered by various agencies. The Jawoyn Association has a database to which PWCNT may be able to contribute; however, a suitable arrangement needs to be made for this to occur.

Though much cultural information has been collected, there is no cultural heritage management plan to direct management of cultural assets. With the Nitmiluk Board's endorsement, a simple document identifying at-risk sites and focusing on periodic monitoring is needed. There have been some improvements in ranger knowledge of cultural values in the past year. Together with a Jawoyn Traditional Owner, rangers visited one of the park's remote rock art sites for the first time. A ceremonial site was also located. A sacred site was identified at Leliyn and registered with the Aboriginal Areas Protection Authority in 2013.

### Cultural values at a glance

The park has an annual action plan for cultural management that directs action	×
Capacity of the park's ranger team to manage cultural heritage programs	↔
Knowledge of the park's cultural values	↑

