Uluṟu-Kata Tjuṯa National Park

2020 Conservation Outlook Assessment

SITE INFORMATION

Country: Australia
Inscribed in: 1994
Criteria: (v) (vi) (vii) (viii)

This park, formerly called Uluru (Ayers Rock – Mount Olga) National Park, features spectacular geological formations that dominate the vast red sandy plain of central Australia. Uluru, an immense monolith, and Kata Tjuta, the rock domes located west of Uluru, form part of the traditional belief system of one of the oldest human societies in the world. The traditional owners of Uluru-Kata Tjuta are the Anangu Aboriginal people. © UNESCO

SUMMARY

2020 Conservation Outlook

Finalised on 02 Dec 2020

GOOD

The site's World Heritage values are in good condition, likely to be maintained and indications are that the protection and conservation of the site is generally highly effective. The site is Aboriginal owned land and jointly managed using a combination of traditional and scientific knowledge and through a Board of Management comprising a majority traditional owners (who refer to themselves as Aṉangu). Park Management is guided by Tjukurpa (traditional Aṉangu law and culture) and Australian Government laws and policies. The key threats to the site are: wildfire, feral animals (camels, foxes, cats and rabbits), weeds and invasive exotic species (especially buffel grass) and erosion. These are a threat to the sites' biodiversity values and potentially to its World Heritage Values. These threats are all well recognized in the park's Management Plan. However, while traditional knowledge and skills remain strong and ensure that the park's World Heritage value as a living cultural landscape is maintained, the future loss of traditional knowledge and skills is a major concern for Aṉangu and park management. The new Management Plan prepared by the joint Board of Management and Director of National Parks using participatory processes fosters Aṉangu decision making, and is strongly reflected in the future direction and priorities of the park.

FULL ASSESSMENT

Description of values

Values

World Heritage values

Ongoing geological processes **Criterion:(viii)**

Uluṟu is affected by erosional processes including sheeting of rock parallel to the surface and granular disintegration known as cavernous weathering. Uluṟu and Kata Tjuṯa are exceptional examples of tectonic, geochemical and geomorphic processes which result in the different composition of these two relatively close outcroppings including their different extent of block tilting and types of erosion, the spalling of the arkose sediments of Uluṟu and massive 'offloading' of conglomerate at Kata Tjuṯa (DoE, 2013; DNP, 2010).

Natural phenomena of exceptional aesthetic and spiritual importance **Criterion:(vii)**

The relative simplicity of the Uluṟu monolith and its contrasts with the many domes of Kata Tjuṯa create a landscape of outstanding beauty. They are part of an important cultural landscape and have profound significance to Aṉangu, as well as many Australians (DoE, 2013; DNP, 2010).

Spectacular desert landscape **Criterion:(vii)**

Uluṟu-Kata Tjuṯa National Park covers 1,325 km2 of arid ecosystems and is located in the centre of Australia in the Western Deserts, the traditional lands of Aṉangu, who are typically Pitjantjatjara and Yankunytjatjara language speakers. Uluṟu and Kata Tjuṯa are exceptional examples of tectonic, geochemical and geomorphic processes (DoE, 2013). The park is a living cultural landscape, where Aṉangu continue to use traditional land management methods that they have used over tens of thousands of years to manage culture and country. At the heart of the park is Tjukurpa, Aṉangu law, which informs all major decisions (DNP, 2010).

Other important biodiversity values

Rare and endangered species

The park is home to a range of rare and threatened plants and animals. The mesic habitats of Uluṟu and Kata Tjuṯa shelter species that depend on the shade and water found there including the shoemakers frog (Neobatrachus sutor) living around the waterholes, the fat tailed antechinus (Pseudantechinus macdonnelensis) sheltering in the scree slopes and the desert mouse (Pseudomys desertor) that lives in the thick patches of Themeda grass (Reid 1993). Rare branchiopods, including fairy shrimp and clam shrimp, live in the temporary pools that form on the summit of Uluṟu after rain, their eggs having survived the dry conditions to hatch when moisture is available (Brendonck et al 2016).
The endangered great desert skink (Liopholis kintorei) occurs in sand plains that are transitional between the mulga outwash around Uluṟu and Kata Tjuṯa and the dune fields beyond. The species is unusual in that it digs family burrows and multiple generations of a family add to the same burrow built by the original pair (McAlpin et al 2011). The site also supports a rich reptile fauna (74 species). These include species of 5 legless lizard, 11 geckoes, 8 dragons, 6 goannas, 29 skinks, 3 blind snakes, 2 pythons and 8 elapid snakes. This is richer than that recorded for any other area of comparable size in the semi-arid zone (DNP, 2010; Dittmer, 2016).
Many mammals have become locally extinct at the site including the common brushtail possum (Trichosurus vulpecula), the black- footed rock wallaby (Petrogale lateralis), and the sandhill dunnart (Sminthopsis psammophila, NRETAS 2013). One endangered species, the mala or rufous hare wallaby

(Lagorchestes hirsutus) important to local culture, was reintroduced in 2007 into a semi wild predator proof exclosure following local extinction.
The park's flora represents a large portion of plants found in Central Australia (DNP, 2010), many with a restricted range and therefore considered to have high conservation value. 619 plant species have been recorded, among them seven rare or endangered species, which are generally restricted to the moist areas at the bases of Uluṟu and the domes of Kata Tjuṯa. These include five relict species – Stylidium inaequipealum, Parietaria debilis, Ophioglossum lusitanicum subsp. coriaceum, Isoetes muelleri and Triglochin calcitrapum. In addition, the main occurrence of the sandhill wattle (Acacia ammobia) is just east of Uluṟu.
The park is also home to plants and animals that have cultural significance to the Aṉangu people. Ancestral beings such as the Mala, Woma Python, Western Brown Snake, Blue Tongue Lizard, Marsupial Mole, Kingfisher and others occur, as well as important bush foods and medicines, such as kangaroo, emu, bush turkey, wattle seed and millet seeds.

▶ **An arid ecosystem**

The park receives an average rainfall of 300mm per year. The landscape is dominated by spinifex and low shrubs, hummock grassland with large desert oaks dotted on the sand dunes and plains. Sizeable areas of mulga woodland and other low shrubs also occur on dunes and swales. The alluvial flow areas at the base of the major rock formations support large bloodwoods, acacias and native grasses. Water holes and soaks provide restricted habitats for a number of rare and unique plant species. Larger stands of mulga and other acacias dominate the harder, wide, sand plain surrounding Uluṟu and Kata Tjuṯa. The vegetation is modified by substrate stability, climate and fire arranged concentrically around the monolith formations (DoE, 2013). The Uluṟu-Kata Tjuṯa landscape is a representative cross-section of Central Australian arid ecosystems. Aṉangu and non-Aboriginal scientists distinguish the various landscapes in similar ways. Aṉangu recognise the main habitats of the park as puli (rocky country), puti (shrub lands, particularly the mulga flats between sandhills), karu (creek lines and run-off plains), tali (sand dunes), pila (spinifex plains, low areas between dunes) and nyaru (recently burnt country) (DNP, 2010).

Assessment information

Threats

Current Threats

Low Threat

The key threats to the site, namely fire, feral animals, weeds and invasive exotic species are a threat to the site's biodiversity values rather than a threat to its listed World Heritage Values. However, the current threats to the site's World Heritage values are low. Wildfire, Buffel Grass and erosion are major risks but are well recognized in the plan of management and will be addressed by re-focussing park management efforts on research, survey and monitoring and pest plant and animal control programs. Disruptions to intergenerational transfer of cultural and ecological knowledge in Aṉangu communities is a high threat but being actively addressed. The effects of climate change are unknown, but are a likely key threat given its potential to negatively impact the wider ecosystem and interact with other aforementioned threats.

▶ **Fire & Fire Management** — **Low Threat**

(Wildfires) — Inside site, widespread(15-50%)

Destructive wildfires burnt much of the park in 2002. The Management Plan acknowledges traditional management practices carried out by Aṉangu and park staff as an integral part of 'caring for country'. Aṉangu use fire (patch burning) and other methods to manage their country; its habitats, plants and animals. Joint management of the park by Aṉangu and Parks Australia, brings together cultural and scientific knowledge and experience (DNP, 2010). Wildfires remain a key threat to the values of the site. The ecosystems are characterised by boom/bust cycles where infrequent but large rainfall events drive periods of short lived but extremely profuse vegetation growth. Following the rainfall, the vegetation dies leaving large amounts of fuel and an ecosystem extremely prone to massive wildfire.

Appropriate prescribed burn programs that reduce fuel loads and promote a mosaic of fire age classes are undertaken annually to reduce this risk. Fire planning and management is undertaken jointly with Aṉangu and (sometimes) other agencies such as the NT Government, the Central Land Council and the Bushfires Council (IUCN Consultation, 2017). Heavy rainfall during 2016 and 2017 has resulted in heavy vegetation fuel loads, which pose a high wildfire threat to biodiversity and cultural values. Significant areas have been burnt since then, however, an ongoing burning regime is being implemented to help reduce the risk of large wildfires (IUCN Consultation, 2020a). The summer of 2020 saw an increase in public interest in Aboriginal cultural burning across Australia - the practices at Uluṟu may attain increased significance from this (IUCN Consutlation, 2020b).

Roughly every 10 years following a significant rainfall, the park experiences higher than average wildfires caused by dry lightning strikes in cured vegetation. Knowing this pattern of rainfall and vegetation response allows the joint management partners to plan ahead with strategic fire breaks and using fire to create a range of vegetation age classes to reduce the risk of large wildfires. In 2019, approximately 6 percent of the park burnt. Planning and implementing annual burns occur with the adjoining Indigenous Protected Area. The last two years have been exceptionally dry with many small shrubs perishing and trees showing significant stress. The effects of climate change and cultural burning is unknown and will be the subject of future research in the park. An annual burning program has been maintained in the park (IUCN Consultation (2020c).

► Invasive Non-Native/ Alien Species

Low Threat

(Feral and invasive species)

Inside site, widespread(15-50%)
Outside site

Buffel grass is an invasive weed species which is now widespread and has significant impact on conservation values. It forms monocultures that out- compete native grasses and other flora, and provides further fuel for wildfires. Other weeds include khaki weed (Alternanthera pungens); Mexican poppy (Argemone ochroleuca); Mossman River grass (Cenchrus echinatus); and caltrop (Tribulus terrestris). Couch grass (Cynodon dactylon) is likely to be spreading in the site (DoE, 2013; Freidel et al 2006; NRETAS, 2013). Invasive animal species, particularly cats, foxes, rabbits and camels, also pose a threat to aspects of the park's biodiversity. Cats and foxes predate on many culturally important species including the blue tongue lizard, sand goanna and great desert skink. Camels graze on sensitive Quandong trees, damage park fencing (e.g. Mala paddock) and scarce desert waterholes essential to many native species and the continuity of the creation songlines that are the essence of cultural law. Park Management and staff sporadically controls these species, such as trapping for foxes and cats and occasional culling of camels, but a more structured approach is needed, for example, by working with the managers of the Indigenous Protected Area that surround the park. Hand-pulling and herbicide control for buffel grass is occurring, however it remains a biodiversity and wildfire threat close to Uluṟu and along creeklines and roadsides at Kata Tjuṯa. Past plant and animal control programs have declined in the last few years with drier than usual years. Efforts have focussed on trapping cats near visitor areas and handpulling buffel grass near Uluṟu waterholes. The effects of climate change are unknown, however larger more frequent wildfires may promote the spread of Buffel Grass.

► Dams & Water Management/Use

Low Threat

(Water extraction)

Inside site, localised(<5%)

An Aquifer Sustainability Assessment of groundwater use from the park's Southern Aquifer (Jacobs 2018) estimated that groundwater levels have been slowly declining over the past 10 years, and that current usage is approaching, or may have already exceeded, the sustainable yield. With projected increases in population, , development and tourism visitation, there is a concern that future use may push the capacity of the aquifer to or beyond its limit. Further studies and continued monitoring of g round water resources will be important for informing decisions about the sustainability of ground water resources.' Registration of the Mutitjulu township sublease inside the park has raised community expectations for economic development and growth. The park and sub-lessee will have to closely monitor water use capability and ensure any future development is sustainable and uses the best available technology and energy efficiency. The effects of climate change and development proposals at Mutitjulu are unknown and a bore monitoring system is required to guide future development and

management decisions. The new park management plan will inform future development (IUCN Consultation, 2020c).

► Household Sewage/ Urban Waste Water

Low Threat
Inside site, localised(<5%)

(Pollution from housing areas and associated infrastructure)

The Aboriginal community of Mutitjulu is entirely contained in the site and is adjacent to the Uluṟu monolith. The community has a population of about 300 people, sometimes more. The associated infrastructure within the park that enables this community to function includes a power station (diesel generators); a sewage treatment area; and a rubbish tip. Airborne rubbish and illegal dumping of construction materials within the community sublease are common, requiring constant monitoring and regulation with contractors.

All essential services to the community are the responsibility of the park. The new management plan proposes upgrading these facilities with the view to transfer responsibility to another agency. In 2020, the park received significant funding to refresh and renew aged essential services in Mutitjulu including water infrastructure and introduction of solar and grey water recycling (IUCN Consultation, 2020c).

► Recreational Activities

Low Threat
Inside site, localised(<5%)

("The Uluṟu climb")

The climb to the top ofUluṟu was permanently closed on 26 October 2019, the 34th anniversary of the Handback of Uluṟu-Kata Tjuṯa National Park to its traditional Aboriginal owners, in line with the long held wishes of Aṉangu. The chain and summit cairn have been removed. The number of visitors climbing Uluṟu steadily declined before its closure to less than 20 percent of visitors (although there was a sharp increase in the period immediately prior to the close). Most visitors who come to the park comply with Park regulations and respect the visitor access restrictions at the sacred sites around the base of Uluṟu. There has been no evidence of illegal climbing following the closure (IUCN Consultation, 2020).

► Changes in traditional ways of life and knowledge systems that result in negative impact

High Threat
Inside site, throughout(>50%)
Outside site

(Loss of traditional cultural and ecological knowledge)

Due to a range of factors associated with the settlement of Australia and socio-economic issues, the loss of traditional cultural and ecological knowledge is considered one of the greatest threats to World Heritage values. In particular, senior Aṉangu have expressed concern that younger generations are not learning traditions and knowledge associated with Tjukurpa, traditional Aṉangu law that is associated with and defines the living cultural landscape of Uluṟu-Kata Tjuṯa National Park (IUCN Consultation, 2017). The threat is widely acknowledged with specific programs designed to increase opportunities for intergenerational transfer of knowledge, flexible employment options and on-country engagement. These are reflected in the Management Plan for the park.

The park has a cultural site management system database for recording condition and treatments. A Knowledge for Managing Country action plan and Cultural Protocols policy will be developed under the new park management plan. Park staff use participatory planning methods to engage Aṉangu and community in planning and implementing park management programs. The park supports a Mutitjulu Community Ranger and Junior Ranger program. It is unclear how climate change may change Aṉangu access to country and cultural activities. Longer, hotter seasons with less rainfall has affected people’s ability to hunt eg. for honey ant after rain (IUCN Consultation, 2020c).

Potential Threats

Data Deficient

Impacts associated with Mutitjulu Community development, increased commercial licences and visitor accommodation and staff quarters at Yulara village may negatively affect important faunal habitat in the Yulara borefields area and the Southern Aquifer. Because of the significance of this area to the supply of moisture and nutrients to the various significant species, this may be a potential threat, as will be potential development to carrying capacity at Mutitjulu Community and aged essential service infrastructure.

Installation of bore monitoring and telemetry equipment will assist with development proposals and thorough impact assessments and ongoing flora and fauna surveys will be required.

▶ **Residential Areas** **Data Deficient**

(Impacts associated with visitor accommodation and staff quarters) Inside site, localised(<5%)

Some impacts associated with the Yulara village (main township and visitor accommodation) may be negatively affecting important faunal habitat in the Yulara borefields area (NRETAS, 2013). Proposed developments within the Mutitjulu Sublease are aimed at supporting economic development and self-determination require careful assessment and monitoring.

Proposed quad bike tours and overnight bushwalking in the park have the potential to impact park values if not managed properly. Impact assessments are required and the overnight hiking has triggered a requirement for assessment under the EPBC Act (IUCN Consultation, 2020c).

▶ **Erosion and Siltation/ Deposition** **Low Threat**

(Continuous erosion) Inside site, localised(<5%)

Major surface features of the Uluṟu monolith include sheet erosion with layers 1 – 3 m thick, parallel to the existing surface, breaking away. A number of caves, inlets and overhangs at the base are formed by chemical degradation and sand blast erosion (DoE, 2013). Erosion is a particular concern in some of these areas. Vehicle use by early visitors around the base of Uluṟu resulted in severe gully erosion. In addition, the Uluṟu Ring Road was built above the natural ground level in places, which has significantly altered the sheet flow and caused significant erosion. Soil susceptibility to erosion and changes to surface flows are a risk and must be carefully considered in planning, designing and maintaining park infrastructure. Soils of the Gillen land system based around Uluṟu and Kata Tjuṯa are the most susceptible to erosion in the park where tourism pressures are greatest (DNP, 2010). Some tracks at Uluṟu are widening due to mixed uses and these and other tracks throughout the park display severe erosion and rutting. Minor track repairs have recently been implemented and large works are scheduled with additional funding over the next three years (IUCN Consultation, 2020c).

Overall assessment of threats **Low Threat**

Threats to the World Heritage values of the site associated with criteria (vii) and (viii) are low. Erosion is a particular concern in some areas of the site but is well recognized in the Management Plan and erosion control strategies will continue to be implemented, especially around the base of the Uluṟu monolith. Most of the impacts on the site (wildfire, feral animals, weeds and climate change) affect the biodiversity values of the site and are addressed in the current Management Plan.

Protection and management

Assessing Protection and Management

▶ **Highly Effective**

Joint management between the Traditional Owners (Aṉangu) and Parks Australia brings together cultural and scientific knowledge and experience, as well as providing opportunities for formal western style education, employment and community development (DNP, 2010). The Board of Management provides the foundation for management and its aspirations, directions and priorities are prescribed in Management Plans (IUCN Consultation, 2020a). The Board is supported by three consultative committees that advise the board on tourism, commercial film and photography and scientific and cultural heritage matters. In 2020, the Director of National Parks is conducting a Park Lease audit and the joint management partners are embarking on a review of the Park Lease. The park is surrounded by

the Katiti Petermann Indigenous Protected Area which has overlapping traditional ownership, compatible governance arrangements and collaborative land management programs with the park.

▶ **Highly Effective**

The management system to date has effectively preserved the values of the site, despite an increase in recent wildfires due to successive dry years and a reduction in land management programs due to the busiest visitor years on record with climb closure. Populations of EPBC Act listed threatened species and their habitats have been conserved (DNP, 2010). A performance (indicator) management plan (PMP) was approved by the Board of Management in 2017 and since then has been used to report to the Board annually on key aspects of the parks management. The PMP will be revised in-line with the new draft Management Plan when it comes into effect (IUCN Consultation, 2020). The new plan has an increased focus on Aṉangu aspirations for sustainably managing country and culture for future generations and visitors to the park.

▶ **Highly Effective**

The management plan identifies zoning that provides for biodiversity conservation in the reserve, the landscape and the needs of the Aṉangu community, the Central Land Council and Uluṟu–Kata Tjuṯa Land Trust in accordance with the Lease Agreement (DoE, 2013; DNP, 2010). The site is also mostly surrounded by an Indigenous Protected Area which has many similar and complementary management objectives (IUCN Consultation, 2020a).

▶ **Highly Effective**

The Park is managed in accord to prescriptions contained in the Management Plan and in accord with Northern Territory and Federal legislative obligations including: those specific to World Heritage sites; Parks Australia policy and planning and legislative, systems; and the Park lease agreement. The Park makes a significant contribution to the comprehensiveness, adequateness and representativeness of the National Reserve System, which aims to contain samples of all regional ecosystems across Australia, their constituent biota and associated conservation values, in accordance with the Interim Biogeographic Regionalisation for Australia. The park also contributes to the objectives of the National Strategy for the Conservation of Australia’s Biological Diversity by conserving biological diversity in situ, integrating biological diversity conservation and natural resource management, managing threatening processes, improving knowledge of biological diversity and involving the community in biodiversity conservation. Migratory species that occur in Uluṟu–Kata Tjuṯa National Park are protected under international agreements such as the Bonn Convention for conserving migratory species, and Australia’s migratory bird protection agreements with China (CAMBA), Japan (JAMBA) and Korea (ROKAMBA) (DNP, 2010). The recent declaration of the Katiti-Petermann Indigenous Protected Area (IPA) surrounding the park further strengthens the protection of the site. The IPA surrounds the national park and enables cooperative land management over a large area (IUCN Consultation, 2017). Joint planning and implementation for annual burn programs occurs with the IPA, and Indigenous land managers from South and West Australia through the Tri-state Waru committee (IUCN Consultation, 2020c).

▶ **Mostly Effective**

Uluṟu-Kata Tjuṯa National Park is a living cultural landscape tens of thousands of years old. It is Aboriginal land which Aṉangu have leased to the Director of National Parks to be jointly managed (IUCN Consultation, 2017). Joint management is being practiced through the implementation of lease provisions and through a Board of Management, which contains a majority of Aṉangu traditional owners. The strength of Uluṟu-Kata Tjuṯa National Park’s management is the direction and guidance of Aṉangu in key aspects of park management through joint management arrangements, working together and consultation procedures, approved by the Board of Management and overseen by the Central Land Council, which represents the land interests of Aṉangu. Aṉangu are also involved in on ground management programs and through the Board of Managements consultative committees (IUCN Consultation, 2020). However, concerns have also been expressed that internal influences such as Public Service employment standards and WH&S conditions, and a range of socio-economic factors like literacy and numeracy, poor housing, health issues continue to limit Aṉangu aspirations (IUCN Consultation,

2017b).
A new draft Management Plan has been prepared by the joint Board of Management and Director of National Parks using participatory processes to foster Aṉangu decision making, in relation to the future direction and priorities of the park (DNP, 2019). This is most evident in the Board's vision for the park which is that Uluṟu-Kata Tjuṯa National Park is a place where Aṉangu law and culture is kept strong for future generations (IUCN Consultation, 2020). The new Management Plan also includes a full chapter on addressing Aṉangu benefits from employment, enterprise and economic development (DNP, 2019). The increase in commercial licences in the park has provided increased opportunities for Aṉangu engagement and negotiation of "Aṉangu benefits packages" to promote employment and development of sustainable livelihoods.

▶ **Highly Effective**

Management Plans for Uluṟu-Kata Tjuṯa National Park are prepared under provisions of the Environment Protection and Biodiversity Conservation Act 1999 (DNP, 2010). Management is underpinned by Tjukurpa (pronounced 'chook-orr-pa', meaning life, law and traditional culture) and Australian laws which are both central to the 10 year Management Plan to guide the management of the park. Since 2017, the Board of Management and Director of National Parks have been developing a new draft Management Plan for the period 2020-2030. This has involved a participatory process including the preparation of the vision and goals for the park to guide the plan's preparation and the strategic content of the plan being developed and approved by the Board of Management. Upon registration, it will be a legally binding document under Australia's Environment Protection and Biodiversity Conservation Act 1999 reflecting the Director of National Parks obligations under the park lease agreement (IUCN Consultation, 2020a).

▶ **Mostly Effective**

Enforcement of the relevant laws and regulations is mostly effective and is based on an education and compliance focus rather than enforcement.
However, there are no compliance issues that significantly threaten park values, especially given the closure of the Uluṟu climb, as illegal climbing was the major compliance issue (e.g. when the climb was closed due to safety reasons like rain and strong winds) (IUCN Consultation, 2020a).

▶ **Highly Effective**

No recent Committee Decisions.

▶ **Mostly Effective**

In accordance with the Management Plan, stakeholders, neighbours, state agencies and park user groups – visitors and tourism operators - are involved in, and contribute to park management activities. A key sustainability issue is groundwater capacity for Mutitjulu community and further studies are needed to determine its sustainability (IUCN Consultation, 2020a). Development applications for Mutitjulu Community and the Yulara borefield areas are under consideration (IUCN Consultation, 2020c).

New tourism activity (the use of cycles and segways on tracks originally developed for low impact walking) has resulted in tracks widening substantially in recent years, with severe erosion and rutting becoming apparent. Regular track maintenance or preventative works have not been conducted, especially during the busy 2018-20 period pre climb closure. Minor track repairs have recently been implemented and comprehensive track works are scheduled with additional funding over the next three years (IUCN Consultation, 2020c).

▶ **Mostly Effective**

Planning and financial decision-making are based on best available information, good practice and Government requirements. High levels of staff expertise and performance are maintained (DNP, 2010) however, this can be difficult to do in a remote area (e.g. due to staff retention, social impacts of living in remote areas). However, staff turnover hinders facilitating long term projects and building long lasting and productive relationships with the Aṉangu community (IUCN Consultation, 2020b). Actions are being

undertaken to increase levels of employment of Aṉangu in Park Management roles as well as private enterprises to ensure the Aṉangu community has a sustainable and healthy future. Given the very remote location, costs for effective park management are very high. Visitation is the key source of park income and has increased over the last few years. This has also resulted in increased payments to Aṉangu under the park lease agreement. The COVID pandemic closed the park for 3 months in 2020, likely impacting income - this may be slightly offset by increased domestic tourism incentives offered by the Federal and Northern Territory Governments (IUCN Consultation, 2020a).

An injection of Federal funding over three years for refreshing and renewing aged park infrastructure and Mutitjulu Community essential services commenced in 2020. It will be important to have asset management plans and preventative maintenance programs in place with experienced staff to ensure lasting benefits (IUCN Consultation, 2020c). Seventy-five percent of own source revenue derived from park entry fees, permits, rent and sales is used annually for park operations and the remainder is paid to Traditional Owners through the Central Land Council. The impacts of low park visitation under the COVID-19 pandemic has been supplemented by the Government up until December 2020. While domestic visitation is returning, low visitor numbers may impact on non-capital work on park including natural and cultural resource work, visitor patrols and compliance. An increase in the number of commercial licences contributes to park revenue and Aṉangu benefits (IUCN Consultation, 2020c).

► **Some Concern**

Building livelihoods and other benefits for Aṉangu, particularly young Aṉangu is a key goal of the Board of Management. Aṉangu employment has increased over the last few years and an Aṉangu employment and training plan has also recently been completed. However, employing and developing Aṉangu skills remains one of the major challenges and priorities. The remote location also poses some challenges for Aṉangu and non-Aṉangu training and development (IUCN Consultation, 2020a).

Recent efforts have focussed on accredited group training delivered locally to park staff, Mutitjulu Community Rangers and Indigenous ranger groups associated with the adjoining Indigenous Protected Area. Implementation of the 2020 Aṉangu Employment Pathway includes Junior Rangers, work experience, community ranger, trainee and park staff pathways. Aṉangu benefit packages offer incentives for commercial licence holders to commit to Aṉangu training and employment in their operations (IUCN Consultation, 2020c).

► **Highly Effective**

The Cultural Centre is the primary opportunity for increasing visitor awareness of living cultural traditions and the natural and cultural values of the Park. It is also the base for several Aṉangu enterprises to service visitor needs for tours, arts/crafts and refreshments. A ‘Knowledge for Tour Guides’ program continued to improve tour guides’ knowledge of Aṉangu culture, and natural heritage of the park. Public awareness and appreciation of park values is also enhanced through a free daily interpretive walk (the Mala walk) which showcases the park’s cultural and natural values. Park social media, education packages and junior ranger programs are developed by park staff. Commercial operators provide a high quality service to park visitors and help to manage high numbers of visitors, especially through the provision of interpretive information about the parks values. A Visitor Infrastructure Plan and a Park Interpretation Strategy have been endorsed by the Board and priority planning will commence for upgrading the Cultural Centre which is now 25 years old (DNP 2019; IUCN Consultation, 2020c).

► **Mostly Effective**

Aṉangu and non-Aboriginal people perceive Uluṟu-Kata Tjuṯa National Park in very different ways. In recent years over 350,000 people visited the park each year, to experience the spectacular and iconic scenery and learn about Aṉangu culture. Many people regard the Uluṟu monolith as one of the natural wonders of the world. For non-Aboriginal Australians, Uluṟu is the symbolic heart of the nation and is socially important for its recreational and aesthetic qualities. Visitor impacts (on reserve management, values, the environment and other visitors) are within acceptable levels. The permanent closure of the Uluṟu climb will also minimize impacts on the park, particularly by enhancing the parks cultural values,

as Aṉangu considered climbing Uluṟu to be culturally inappropriate.
Although already actively involved and encouraged/supported by the Park to do as much as possible, Aṉangu want to be more involved in tourism businesses and interpretation delivery. Policies and regulations in relation to visitor management have been developed in such a way as to emphasise Aṉangu perceptions of appropriate visitor behaviour. The most prominent recent example of this was the decision by the Board of Management to close the Uluṟu climb, which was based on the wishes of Aṉangu. Also of particular importance are the policies and guidelines developed with the Board of Management for commercial filming and photography and the closing off of certain areas (e.g. sacred sites) around the base of Uluṟu, to ensure visitors do not inadvertently contravene Tjukurpa restrictions. The Cultural Centre has greatly increased opportunities for visitors to learn about Tjukurpa, Aṉangu culture and the park. Within the bounds of appropriate access, Tjukurpa provides a basis for most of the interpretation of the park to visitors. Aṉangu want visitors to understand how they interpret this landscape. Tjukurpa contains information about the landscape features, the ecology, the plants and animals, and appropriate use of areas of the park. Tjukurpa has been passed down through the generations and can be shared with visitors. In addition, Aṉangu believe that visitors' understanding of the park can be enhanced by providing information about how Aṉangu use the park's resources and the history of their use of these resources (DNP, 2010).

▶ **Mostly Effective**

Effective research and monitoring provides essential information to assist the Director and the Board, and the Australian Government, to make sound decisions about management of the park. This work may be carried out by park staff or consultants engaged by the Director. It may also be carried out in collaboration with other government agencies, organisations and individuals, including researchers and tourism businesses using/on the site.

Visitor monitoring has continued, however, some concerns exist with regards to the effectiveness of monitoring of the park's biodiversity and the level of engagement of Aṉangu people in the process. Biodiversity monitoring with the aid of Aṉangu should be a high priority for the park in order to merge and grow western scientific monitoring methods with traditional knowledge (IUCN Consultation, 2020b). An annual Mala census has occurred over the last two years with the participation of Aṉangu. The effects of increased development and climate change are unknown (IUCN Consultation, 2020c).

Although monitoring programs are not extensive, results of monitoring and surveys in the park provide valuable information about natural and cultural resources and visitor use of the park. Regular monitoring reveals whether and how conditions have changed in relation to the baseline information and helps in assessing the effectiveness of management programs and making better management decisions.

▶ **Mostly Effective**

Scientific research and surveys are not a major aspect of the parks management (IUCN Consultation, 2020a). However, research is sometimes undertaken by Aṉangu, Park staff and other research partners (such as University researchers) leading to a better understanding of the park's biodiversity and natural and cultural heritage values, and the pressures these are under from a variety of sources; a better understanding of visitors: who they are, their expectations and awareness of the park, levels of satisfaction, and preferences and use of the park. The Board and Park management continuously seek to more effectively involve Aṉangu and traditional skills and knowledge to contribute to effective management of the park and the region and protect park values (DNP, 2010; McAlpin 2006). It may be appropriate to develop a Research Plan for the site in conjunction with Aṉangu, Central Land Council and others, to optimise research interactions with internal and external researchers. A research proposal is in development to assess the effects of climate change and cultural burning on significant habitats within the park (IUCN Consultation, 2020c).

Overall assessment of protection and management

Highly Effective

Aṉangu and Parks Australia share decision-making for the management of Uluṟu- Kata Tjuṯa National Park. Management Plans for Uluṟu- Kata Tjuṯa National Park meet all the statutory requirements for management plans under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). They also address obligations under the park lease and are a mechanism for joint planning and implementation of the future directions and priorities for the park. This occurs through the Board of Management, planning of on-ground programs jointly between Aṉangu and park staff and other Park related plans, which also play an important/crucial role in the maintenance and protection of the World Heritage values.

▶ **Assessment of the effectiveness of protection and management in addressing threats outside the site**

Mostly Effective

The current focus of management remains on operational programs for the effective management of fire, as well as feral animals, weeds and invasive plants, in particular buffel grass, the impacts of climate change and visitor management issues. In addition to the site specific Management Plan, there are several programs and national recovery plans relevant to particular threatened species and other management issues such as the Australian Weeds Strategy, Threat Abatement Plan for Predation by Feral Cats, Threat Abatement Plan for Predation by European Red Fox, Threat Abatement Plan for Competition by Feral Rabbits. Across the Northern Territory fire is mapped continuously under the North Australia Fire Information Project. Data from all these programs are integrated into site management, research and monitoring programs (NRETAS, 2013). A key factor to address threats outside of the park and to promote seamless management of cultural heritage programs, is working collaboratively with Aṉangu land managers and the Central Land Council, who manage in the Indigenous Protected Area that surrounds the park (IUCN Consultation, 2020a).

State and trend of values

Assessing the current state and trend of values

World Heritage values

▶ **Ongoing geological processes**

Low Concern
Trend:Improving

Uluṟu is affected by erosional processes including sheeting of rock parallel to the surface and granular disintegration known as cavernous weathering. The monoliths of Uluṟu and Kata Tjuṯa are exceptional examples of tectonic, geochemical and geomorphic processes. Therefore changes over time continue to occur. The improvements to site and visitor management in particular closing the climbing of Uluṟu has improved the integrity and safety of the site, including because the chain that was used to assist people to climb Uluṟu has been removed (IUCN Consultation, 2020). Erosion is a particular concern in some areas but is well recognized in the Management Plan and improvements have been implemented (e.g. erosion control works). Vehicle use by early visitors around the base of Uluṟu resulted in severe gully erosion. Soils of the Gillen land system based around Uluṟu and Kata Tjuṯa are the most susceptible to erosion in the park where tourism pressures are greatest. Soil susceptibility to erosion is a major risk and is carefully considered in planning, designing and maintaining park infrastructure (DoE, 2013; DNP, 2010).

▶ **Natural phenomena of exceptional aesthetic and spiritual importance**

Good
Trend:Stable

Aṉangu are now working together with park rangers to look after the natural heritage according to traditional law, and Piranpa (non-Aṉangu) rangers are receiving training in traditional land management. The values of the site are far more respected by visitors than they previously were.
In 2011 the Indigenous Land Corporation purchased Ayers Rock Resort, located at Yulara inside the Park, paving the way for significant increases in Indigenous business interests in the nearby communities. However, the potential of the Resort to employ local Aṉangu has not been realized yet but recent initiatives are increasing employment levels. Doing so will also enhance the visitor experience and appreciation of the site as a profoundly significant Indigenous place, while providing employment opportunities for traditional owners linked to knowledge of their country (DoE, 2013; DoNP, 2010; State Party of Australia, 2002). Site's values remain in good condition and stable (IUCN Consultation, 2017).

▶ Spectacular desert landscape

Good
Trend:Stable

Aṉangu have lived in and maintained the landscape and Tjukurpa at Uluṟu and Kata Tjuṯa for many thousands of years. For the Indigenous community it has profound cultural significance. Many people regard Uluṟu as one of the natural wonders of the world. For non-Aboriginal Australians, Uluṟu is the symbolic heart of the nation and is socially important for its recreational and aesthetic values. The work of the Traditional Owners together with Parks Australia is improving the sites values by addressing previous negative behaviours introduced by Europeans which were damaging the ecological and cultural integrity of the site. This included climbing on the surface of Uluṟu, driving around its base and swimming in water holes (DoE, 2013; DNP, 2010; Periodic Report, 2002). The effects of climate change are unknown, but have the potential to negatively impact the surrounding natural and cultural landscape. Overall the site's values remain in good condition and stable (IUCN Consultation, 2020c).

Summary of the Values

▶ Assessment of the current state and trend of World Heritage values

Good
Trend: Stable

The site receives high levels of very appropriate and respectful management that is not only ensuring protection of the sites natural and cultural World Heritage values, but significantly increases the respect of the wider Australian and global community to better appreciate the site and its complex values. The maintenance of the living cultural landscape and living traditions is underpinned by joint management governance arrangements that ensure that Aṉangu are key decision makers in all aspects of park management. This includes strategic decision making, management planning, environmental and cultural resources management programs and tourism management and development. The site’s natural values – spectacular natural phenomena of exceptional aesthetic and spiritual importance, as well as ongoing geological process – remain well preserved. A review of the joint management legislation and re-focus on Aṉangu aspirations for country, culture and livelihoods in the new management plan is a welcome re-focus away from tourism and the busiest year on record preceding the climb closure. Significant capital funding will refresh and renew aged park infrastructure and Mutitjulu Community essential services. The effect of climate change and development on the park is unknown.

▶ Assessment of the current state and trend of other important biodiversity values

Low Concern
Trend: Stable

The key issues for the site: wildfire, feral animals, weeds and invasive exotic species and climate change are a threat to the site's other importnat biodiversity values. However, these threats may also impact on the parks cultural World Heritage values, such as through the loss of traditional ‘bush foods’ and medicines and a change to the way Aṉangu access country. These threats are interrelated and together with climate change impact significantly on available ground water, which is a key determinant to the survival of the threatened species. The site supports an exceptional reptile fauna (74 species), many plant species with a restricted range and eleven migratory species.

It is therefore considered to have high conservation value and botanical significance. These threats are well recognized and prioritised in the Management Plan. There has been little research, survey or monitoring in the park in recent years except for an annual Mala census. The recent focus on visitor management and services in the lead up to climb closure (2018-20) has impacted the amount of time spent together on country and opportunities for intergenerational knowledge transfer to occur (IUCN Consultation, 2020c).

Additional information

Benefits

Understanding Benefits

▶ **Sacred natural sites or landscapes**

Uluru–Kata Tjuta National Park is on the traditional lands of the Pitjantjatjara and Yankunytjatjara Aboriginal people (known locally as Aṉangu). It is part of an extensive Aboriginal cultural landscape that stretches across the Australian continent. The site represents the combined works of ancestral elders and nature over millennia. The landscape has been continuously and sustainably managed using traditional Aṉangu methods governed by Tjukurpa (Traditional Law). The Aṉangu have obligations to maintain Tjukurpa and want to ensure that these obligations and cultural traditions continue to be recognized (DNP, 2010).
The park is also home to plants and animals that have cultural significance to the Aṉangu people. Ancestral beings such as the Mala, Woma Python, Western Brown Snake, Blue Tongue Lizard, Marsupial Mole, Kingfisher and others occur, as well as important bush foods and medicines, such as kangaroo, emu, bush turkey, wattle seed and millet seeds.

Climb closure enhanced cultural values and fostered universal respect for Aṉangu. Provision of alternative activities with cultural elements increased understanding and appreciation.

▶ **Importance for research,**
Contribution to education

Aṉangu knowledge of sustainable land use derives from a detailed body of ecological knowledge which includes a classification of ecological zones. This knowledge continues to contribute significantly to ecological research and management of the park. Aṉangu landscape management followed a traditional regime of fire management, and temporary water resources were maintained by cleaning and protecting soaks and rockholes. Aṉangu landscape management methods are now integral to management of the park. The site is very well managed through a combination and sharing of traditional and scientific knowledge through the Board of Management comprising a majority Aṉangu. All major park management decisions are guided by Tjukurpa, which is reflected through the park's consultation guidelines, which require consultation on a wide range of park management issues. Aṉangu welcome visitors in order to enhance visitors' knowledge and appreciation of what constitutes culturally appropriate behaviour as part of the experience of visiting a jointly managed national park (DNP, 2010). It may be appropriate to explore ways to document Aṉangu knowledge in culturally-appropriate forms, and also to consider developing a research plan for the park.

A deeper understanding of climate change and how it will impact cultural practices and access to country (e.g. Cultural burning) is required.

▶ **Wilderness and iconic features**

Within Uluru–Kata Tjuta National Park the monolith Uluru is arguably the most distinctive and iconic landscape symbol of Australia, nationally and internationally. It conveys a powerful sense of the very long time during which the landscape of the Australian continent has evolved. As the park is a living

cultural landscape that has been continuously inhabited for thousands of years it is not considered a wilderness area.

An increase in commercial licences and new activities need to be sustainable.

► **Outdoor recreation and tourism**

The Park receives over 350,000 visitors a year. The Uluru–Kata Tjuta Cultural Centre provides opportunities for visitors to learn about Tjukurpa, Aṉangu culture and the park and experience the iconic monolith of Uluru and the rock domes of Kata Tjuta. Within the bounds of appropriate access, Tjukurpa provides a basis for most of the interpretation of the park to visitors. Aṉangu want visitors to understand how they interpret this landscape. Tjukurpa contains information about the landscape features, the ecology, the plants and animals, and appropriate use of areas of the park.
Tjukurpa has been passed down through the generations and appropriate aspects can be shared with visitors.

Increased variety of activities offered include cycling, segways, and potentially quad bikes and overnight hiking.

►
Central Australia supports a number of tour operators and others who derive a significant proportion of their income from visitors to the park. Tourism is central to the regional economy, particularly in terms of employment. The standard of visitor facilities that Parks Australia develops and maintains in the park greatly influences the quality of tourists' experience of the region and hence sustainability of the tourism industry. Tourism is a major export industry in Australia and is actively promoted by governments at all levels.
Along with other World Heritage sites of significant natural beauty in Australia such as Kakadu National Park and the Great Barrier Reef, Uluru has become a major tourism attraction for national and overseas visitors

The COVID pandemic will have some, at least short-term, impacts on tourism, including in the park. Commercial licences contain incentives for "Aṉangu benefits packages" to promote training, employment or other benefits for traditional owners.

► **Water provision (importance for water quantity and quality)**

Uluru and Kata Tjuta monoliths provide runoff water which finds its way into moist gorges and drainage lines where isolated flora populations persist in an environment otherwise characterised by infertile and dry dunefields within a massive desert region. The waterholes at the base of Uluru are also important for the Aṉangu from a cultural perspective.

The effects of climate change and development are unknown. The approach needs to be cautious, assessing and monitoring impacts, implementing efficient systems, and replaceingaged/ broken infrastructure.

►
The site provides local employment and other economic opportunities to communities in the area. However, increasing the level of Aṉangu employed in the park and through tourism associated with the park is a management priority.

Aṉangu Employment Pathway strategy is aimed at local and regional employment benefits.

► **Legal subsistence hunting of wild game, Collection of wild plants and mushrooms**

Local harvesting of animals and plants is an important food source for Aṉangu and also supports the maintenance of traditions. The rights of Aṉangu to harvest and collect 'bush foods' are protected under the park lease agreement.

Indigenous ecological knowledge and maintenance of traditional hunting and gathering skills.

► **Cultural identity and sense of belonging**

The creation stories associated with the park are a component of unbroken cultural law in the Western Desert. The traditional stories and other cultural associations with the land also provide a strong sense of connection for Aṉangu to their country and each other.

Summary of benefits

Uluru–Kata Tjuta National Park is on the traditional lands of the Pitjantjatjara and Yankunytjatjara Aboriginal people (known locally as Aṉangu). Aṉangu knowledge of sustainable land use derives from a detailed body of ecological knowledge which includes a classification of ecological zones. This knowledge continues to contribute significantly to ecological research and management of the park.
The site is also a major tourism attraction for national and overseas visitors. Tourism is central to the regional economy, particularly in terms of employment. The site provides local employment and other economic opportunities to communities in the area. However, increasing the level of Aṉangu employed in the park and through tourism associated with the park is a management priority.

Projects

Compilation of active conservation projects

№	Organization	Brief description of Active Projects	Website
1	Parks Australia, Aṉangu, and relevant Northern Territory government departments	Surveys and ongoing monitoring of the distribution and abundance of listed species under the EPBC Act. Data on EPBC Act and Northern Territory listed plant and animal species and others of conservation or cultural significance will be maintained, and management programs and activities ensure protection from inappropriate disturbance.	
2	Parks Australia working closely with Aṉangu, the Central Land Council and the Mala Recovery Team	Maintain the captive population of Mala and seek to transfer excess Mala to other enclosures, to ensure the viability of this EPBC Listed threatened species. Volunteers assist with manual removal of buffel grass.	
3	Parks Australia working closely with Aṉangu, the Central Land Council	Controlling buffel grass. Current management consists of removing buffel grass chemical methods and by hand, a resource-intensive process.	
4	Parks Australia working closely with Aṉangu, the Central Land Council	Jointly planning and implementing fire management with Aṉangu. This includes supporting intergenerational transfer of Aṉangu knowledge and skills in fire management so that fire work can continue to be done in the culturally appropriate way. Collaborative fire planning and burn implementation with adjoining Indigenous Protected Area and community ranger groups.	
5	Parks Australia working closely with Aṉangu, the Central Land Council and other landholders	In conjunction with Nguraṟitja, develop and implement invasive animal control programs. This will include: a. assessing and prioritising control of invasive species based on risks to park values and visitor safety and the likelihood control works being effective; b. monitoring invasive species density, spread and effectiveness of control works; c. adopting regional management approaches (where applicable) for long term control options with the CLC and other key stakeholders; d. ensuring control programs are undertaken in accordance with clearly defined objectives and outcomes; and e. compliance with appropriate animal welfare standards and protocols. Work carried out on an ad-hoc basis and opportunistically during successive dry years.	

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