

# SITES OF CONSERVATION SIGNIFICANCE

# **Uluru and surrounds**

# **Location and Description**

Located about 350 km south-west of Alice Springs, Uluru (Ayer's Rock) and Kata Tjuta (the Olgas) are distinctive and globally renowned sedimentary rock formations that rise steeply from the surrounding plains. This Site is rich in vertebrate fauna and provides significant habitat for many threatened species. The dominant vegetation community within the Site is spinifex grassland with low and scattered mulga and desert oak.

# **Tenure and Land Use**

The Site is almost entirely Aboriginal freehold land held by three Aboriginal land trusts (Uluru-Kata Tjuta, Petermann and Katiti). Approximately 50% of the Site is managed for conservation (Uluru-Kata Tjuta National Park); and tourism and Indigenous use are also major land uses within the Site.

#### **Significance Rating**

International Significance

## **Ecological Values**

Nine threatened species are recorded from this Site, including one plant (quandong) and eight vertebrate species. Significant populations of the threatened Great Desert Skink, Brush-tailed Mulgara and Southern Marsupial Mole are known to occur in this Site, but other threatened species, the Black-footed Rock Wallaby and Common Brushtail Possum, are now considered locally extinct. This Site supports a rich reptile fauna and many plant species that have a restricted range within the Northern Territory.

#### **Management Issues**

Buffel grass is widespread within the Site, and has a significant impact on conservation values. Feral animals, especially camel, and fire management are ongoing management issues.

# Condition

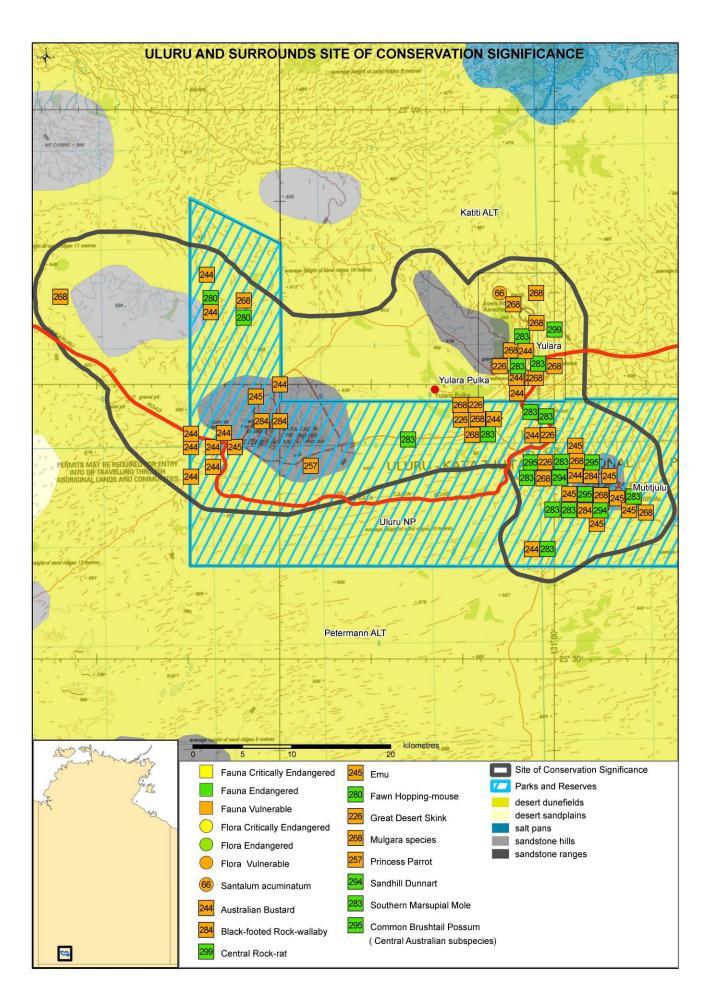
Apart from areas affected by buffel grass and feral animals, the Site is in good condition.

## **Current Conservation Initiatives**

Uluru-Kata Tjuta National Park is managed through a management plan developed in 2000. Buffel grass is the focus of a large-scale removal project in the park, patch burning strategies are pursued to help conserve fire sensitive vegetation, and threatened species are the focus of a number of research projects within the Site.



The area of the Site that lies outside the national park is within the proposed Katiti-Petermann Indigenous Protected Area.



LOCATION	SOCS Number	61 (NT Parks and Conservation Masterplan Map Number 102)
	Latitude/Longitude	25º 15' South, 130º 49' East (at centre)
	Bioregion	Great Sandy Desert
	Description	This site includes Uluru and Kata Tjuta, and intervening sanddune and sandplain country. The boundary of the site is delineated based on consideration of threatened species records and primary habitat for threatened species, land systems mapping, and areas of botanical significance identified by White <i>et al.</i> (2000). It encompasses an area of 1181 km <sup>2</sup> . Major vegetation communities within the site include: hard spinifex <i>Triodia basedowii</i> hummock grassland with mulga <i>Acacia aneura</i> tall sparse-overstorey; porcupine grass <i>T. irritans</i> open-hummock grassland; and <i>T. basedowii</i> hummock grassland with desert oak <i>Allocasuarina decaiseana</i> open-woodland overstorey between dunes (White <i>et al.</i> 2000). Lakes Amadeus and Neale, 14 km north of the site, are also identified as a site of high conservation
		significance in the NT.
	Significance Rating	International Significance
THREATENED SPECIES	Threatened plants and animals (Listings at National/NT level CR - Critically Endangered, EN - Endangered, VU - Vulnerable, NT - Near Threatened, LC - Least Concern, DD - Data Deficient)	Nine threatened species are recently reported from this site. <b>Plants</b> Quandong <i>Santalum acuminatum</i> (-/VU) <b>Vertebrates</b> Great Desert Skink <i>Egernia kintorei</i> (VU/VU)  Australian Bustard <i>Ardeotis australis</i> (-/VU)  Emu <i>Dromaius novaehollandiae</i> (-/VU)  Princess Parrot <i>Polytelis alexandrae</i> (VU/VU)  Brush-tailed Mulgara <i>Dasycercus blythi</i> (VU/VU)  Fawn Hopping-mouse <i>Notomys cervinus</i> (VU/EN)  Mala <i>Lagorchestes hirsutus</i> Southern Marsupial Mole <i>Notoryctes typhlops</i> (EN/VU) Mala were reintroduced into a predator-proof enclosure in Uluru-Kata Tjuta National Park in September 2005. Five threatened species have not been recorded in the site since 1970 and are presumed to now be locally extinct (Central Rock-rat <i>Zyzomys pedunculatus</i> , Golden Bandicoot <i>Isoodon auratus</i> , Red-tailed Phascogale <i>Phascogale calura</i> , Western Quoll <i>Dasyurus geoffroii</i> , Shark Bay Mouse <i>Pseudomys fieldi</i> ). Three threatened species that have been recorded in the site since 1970 may no longer be present (Black-footed Rock-wallaby <i>Petrogale lateralis</i> , Common Brushtail Possum <i>Trichosurus vulpecula vulpecula</i> , and Sandhill Dunnart <i>Sminthopsis psammophila</i> ). Reid <i>et al.</i> (1993) identify three priority areas within Uluru-Kata Tjuta National Park that support populations of threatened species. These include: sandplain country north of the Uluru sunset viewing area through to the Yulara borefields area; Kata Tjuta; and the alluvial plains at the base of Uluru. The transitional sandplains of the borefield area are especially significant; they support buried drainage lines
H		and are likely to receive more moisture and nutrients from adjacent elevated areas than surrounding dunefield Spinifex landscapes (Reid <i>et al.</i> 1993).
	Significance Rating	Not Significant
<b>ENDEMIC</b> SPECIES	Notes	Endemic to the NT: Two plant species recorded from the site are considered to be NT endemics - based on misidentifications in other states ( <i>Eriachne scleranthoides</i> and <i>Acacia olgana</i> ).
		<b>Other:</b> Four plant species recorded from the site are only found in the Great Sandy Desert bioregion within the NT but also occur in other states ( <i>Acacia prainii, Lobelia gibbosa var. gibbosa, Ptilotus exaltatus</i> var. <i>pallidus</i> and <i>Wurmbea centralis</i> subsp. centralis).
WILDLIFE AGGREGATIONS	Significance Rating	Not Significant
	Marine turtles	Not applicable
	Seabirds	None known
	Waterbirds	Large aggregations of waterbirds are not known from this site but 25 waterbird species are recorded.
	Shorebirds	Six shorebird species are known from this site.
	Other aggregations	Caves and overhangs at Uluru and Kata Tjuta support large concentrations of cave roosting bats including maternity sites (Coles 1993).

WETLANDS	Significance Rating	Regional Significance
	Ramsar criteria met	Not assessed
	DIWA criteria met	Not assessed
	Notes	Mutujulu waterhole, at the base of Uluru, is the most reliable natural source of surface water for 100 km. It is a small waterhole but is believed to be frequently recharged and supports wetland vegetation (Duguid 2005).
	Rivers	No information located
	Significance Rating	Regional Significance
FLORA	Notes	Restricted range species: Five plant species recorded from the site have restricted ranges within the NT ( <i>Eragrostis sterilis, Eucalyptus gongylocarpa, Senna artemisioides</i> subs. <i>glaucifolia, Sida</i> sp. <i>Golden Calyces, Sida</i> sp. <i>Watarrka</i> ). Relictual species: Lobelia gibbosa var. gibbosa, Chenopodium pumilio, Eragrostis sterilis and Juncus continuus are relictual plant species recorded at the site.
OTHER ENVIRONMENTAL VALUES		<ul> <li>Uluru-Kata Tjuta National Park has UNESCO World Heritage listing for outstanding cultural and natural universal values (UNESCO).</li> <li>The area of the site outside the national park lies within the proposed Katiti-Petermann Indigenous Protected Area.</li> <li>Uluru-Kata National Park supports a rich reptile fauna (83 species) and is considered of high conservation significance for this reason (Reid <i>et al.</i> 1993).</li> <li>Uluru and Kata Tjuta are identified as Sites of Botanical Significance in White <i>et al.</i> (2000).</li> <li>Eleven migratory species recorded from this site are listed under international conventions or bilateral agreements protecting migratory animals.</li> <li>Mala have been reintroduced into a predator-proof enclosure in Uluru Kata Tjuta National Park and park management is considering reintroducing more regionally extinct species such as Burrowing Bettong, Black-footed Rock-wallaby and Ghost Bat.</li> </ul>
MANAGEMENT ISSUES		<ul> <li>Fire: In the period 1997-2005, most parts of the site (99%) were burnt fewer than two times and no parts of the site were burnt more than four times. In 1976, wildfires burnt about 75% of the national park and large uncontrolled wildfires such as this are a significant threat to the conservation values of the site.</li> <li>Feral animals: Camel, red fox, feral cat, European Rabbit, House Mouse and Rock Dove are recorded from the site. Camels are reported to be damaging vegetation within the national park (Uluru Kata Tjuta Board of Management 2000).</li> <li>Weeds and invasive exotic plants: Four category B weeds (khaki weed Alternanthera pungens, mexican poppy Argemone ochroleuca subsp. ochroleuca, Mossman River grass Cenchrus echinatus, caltrop Tribulus terrestris) are recorded from the site. Buffel grass Cenchrus ciliaris is widespread within the site, and couch grass Cynodon dactylon is likely to be spreading in the site.</li> <li>Other: Some impacts associated with Yulara Village may be negatively affecting important faunal habitat in the Yulara borefields area.</li> </ul>
	NRM groups	Traditional Owners.
	Protected areas	Uluru-Kata Tjuta National Park (594 km <sup>2</sup> / 50% of site). The remainder of the site falls within the proposed Katiti-Petermann Indigenous Protected Area.
MANAGEMENT INFORMATION	Current management plans	<ul> <li>Site-specific plans: Uluru Kata Tjuta National Park Plan of Management (Environment Australia 2000).</li> <li>National recovery plans for threatened species: Great Desert Skink/Tjakura (McAlpin 2001); Southern Marsupial Moles (Benshemesh 2004); Brush-tailed Mulgara (SA Department of Environment and Heritage in prep.); Black-footed Rock Wallaby (WA Department of Environment and Conservation in prep.).</li> <li>Other management plans: Australian Weeds Strategy (NRMMC 2007); Threat Abatement Plan for Predation by Feral Cats (Environment Australia 1999); Threat Abatement Plan for Predation by the European Red Fox (Environment Australia 1999); Threat Abatement Plan for Competition and Land</li> </ul>
	Monitoring programs and research projects	Degradation by Feral Rabbits (Environment Australia 1999). Monitoring of Great Desert Skink <i>Egernia kintorei</i> at Uluru (Uluru Kata Tjuta National Park, Parks Australia) and Yulara borefields (Voyages Resorts) (C. Pavey, NRETAS, pers.comm.). Monitoring of the Brush-tailed Mulgara at Uluru (Uluru Kata Tjuta National Park, Parks Australia) and Yulara borefields (Voyages Resorts) (C. Pavey, NRETAS, pers.comm.). Mala reintroduction project in Uluru Kata Tjuta National Park (Parks Australia) <u>http://www.environment.gov.au/parks/uluru/management/programs/mala-reintroduction.html</u> The Park management plan suggests monitoring of other species such as Striated Grasswren (Environment Australia 2000). Across the NT, fire is mapped continuously under the North Australia Fire Information Project <u>http://www.firenorth.org.au/nafi/app/init.jsp</u>
	Management recommendations	Expand management programs for fire, feral animals and weeds and invasive plants (particularly buffel grass). Encourage the reintroduction of threatened species to the site.

r References	Papers and reports	<ul> <li>Coles, R. (1993). Survey of bats of Uluru (Ayers Rock – Mt Olga) National Park. Final Report to the Australian National Parks and Wildlife Service.</li> <li>Environment Australia (2000). Uluru - Kata Tjuta National Park Plan of Management. Parks Australia North, Environment Australia, Canberra.</li> <li>http://www.environment.gov.au/parks/publications/uluru/management-plan.html</li> <li>Reid, J.R.W., Kerle, J.A. and Morton, S.R. (1993). Kowari 4: Uluru Fauna. The distribution and abundance of vertebrate fauna of Uluru (Ayers Rock- Mount Olga) National Park, NT. Australian National Parks and Wildlife Service, Canberra.</li> <li>White, M., Albrecht, D., Duguid, A., Latz, P. and Hamilton, M. (2000). Plant species and sites of botanical significance in the southern bioregions of the Northern Territory; volume 2: significant sites. A report to the Australian Heritage Commission from the Arid Lands Environment Centre. Alice Springs, NT.</li> </ul>
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Kata Tjuta (Photo: Chris Pavey)



Southern marsupial mole, a threatened species in much of the Arid NT sand country (Photo: NRETAS)