

Davies Creek National Park Management Statement 2013

Park size:	486ha
Bioregion:	Wet Tropics
QPWS region:	Northern
Local government estate/area:	Tablelands Regional Council
State electorate:	Cook



Davies Creek Falls. Photo: NPRSR.

Legislative framework

✓	<i>Nature Conservation Act 1992</i>
✓	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>
✓	<i>Aboriginal Cultural Heritage Act 2003</i>
✓	<i>Wet Tropics World Heritage Protection and Management Act 1993</i>
✓	Wet Tropics Management Plan 1998

Plans and agreements

✓	Japan–Australia Migratory Bird Agreement
✓	Bonn Agreement
✓	Recovery plan for the northern bettong <i>Bettongia tropica</i> 2000–2004
✓	Recovery Plan for the stream-dwelling rainforest frogs of the Wet Tropics biogeographic region of north east Queensland 2000–2004

Thematic strategies

✓	Level 2 Fire Strategy
✓	Level 2 Pest Strategy

Vision

Davies Creek National Park remains a refuge for the endangered northern bettong and endangered creek-side plant communities. The park is enjoyed for recreational purposes by campers and bushwalkers and is a scenic and relaxing attraction for local, domestic and international visitors.

Conservation purpose

Davies Creek National Park on the Atherton Tablelands was gazetted in 1971 to conserve 486ha of the scenic Davies Creek valley and falls. It features rocky granite outcrops and massive boulders, interspersed with low open woodland vegetation.

The park provides habitat for a range of threatened species, including the endangered northern bettong *Bettongia tropica*, and protects endangered vegetation communities.

Being close to the urban areas of Mareeba, Kuranda and Cairns, the park provides a convenient range of recreational opportunities for nature-based tourism, including camping and bushwalking. It provides a destination for commercial tours operators.

Protecting and presenting the park's values

Landscape

Nestled in the western foothills of the Lamb Range, the park's landscape is largely derived from Tinaroo granite. Weathering and erosion of the metamorphic rocks has given rise to the rugged granitic landscapes that characterise the park.

Lying principally between 400m and 700m in altitude, the park includes part of the Davies Creek valley, a rugged landscape of rocky granite outcrops, ridges, boulders and slabs. The creek drops about 75m down the granite escarpment at Davies Creek Falls. Apart from a length of unsealed road, the catchment has no built infrastructure.

Surrounding land use includes Bare Hill Conservation Park, Dinden National Park and Dinden West Forest Reserve.

Regional ecosystems

The park has 12 regional ecosystems (Table 1), of which two are endangered. A further four regional ecosystems have of concern biodiversity status. Six regional ecosystems are listed as of least concern.

The park is characterised by low, open eucalypt and acacia woodlands with tall, moist gallery forest along some sections of the bank of Davies Creek. The park represents a gradational pattern of vegetation between the Wet Tropics and Einasleigh Uplands biogeographic regions which is expressed in its very diverse eucalypt and gallery forest communities.

Native plants and animals

There are 212 plants and 16 fungi recorded for Davies Creek National Park. Four of these, including white birch *Schizomeria whitei*, are listed as near threatened (Table 2).

Over 100 animals have been recorded in the Davies Creek National Park area, including 60 bird, 13 mammal, nine reptile, nine amphibian, one bony fish—the eastern rainbowfish *Melanotaenia splendida splendida*—and 10 insect species. Six of these animals are listed as endangered and one as extinct under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (Table 2).

The endangered northern bettong *Bettongia tropica* is found on the park, but survey data is insufficient to determine statistically robust population estimates.

The endangered waterfall frog *Litoria nannotis* is found in the cascades and waterfalls along Davies Creek. The vulnerable buff-breasted button quail *Turnix olivii* has been sighted infrequently in the park. There has been one confirmed sighting of the endangered Australian lacelid frog *Nyctimystes dayi* in 2001.

Aboriginal culture

The Djabugay people have traditional links to the area which includes Davies Creek National Park. Places of cultural significance exist on the park including examples of rock art.

Shared-history culture

Since non-Indigenous people arrived, the area has been farmed, mined and logged. In 1876 John Atherton, the first European to sight the area, established a home for his family and 1,500 head of cattle near what is now known as the town of Mareeba. Gold was discovered in Davies Creek in the early 1900s and logging in the area also began around this time. Although timber harvesting continued until the 1980s, most occurred from the 1940s to the mid-1970s.

Public Estate Improvement Program (PEIP) road construction occurred during the Great Depression of the 1930s. Davies Creek Road was built under the PEIP to gain access to timber resources in Lamb Range.

Tourism and visitor opportunities

Davies Creek is a popular site for swimming, exploring, camping, and other nature-based activities for local, domestic and international visitors. Facilities include a campground, walking tracks, toilets and the Davies Creek Falls lookout.

Day use areas occasionally experience overcrowding at peak holiday times.

Occasional off-track walkers and unauthorised camping occurs near Davies Creek Falls, but impacts are generally temporary and low. Gazetted road access is provided to the falls car park and camping area and to the boundary with Dinden National Park.

Education and science

The location of the park and good camping facilities make the park accessible for researchers.

A number of scientists and researchers have studied the northern bettong in the Lamb Range in particular at Davies Creek National Park.

Other key issues and responses

Pest management

Pest plants

Broadly, the dry open forests are in good condition. Pest plants are confined largely to roadsides, camp nodes and day use areas.

High biomass grasses threaten the low open woodland areas. When identified on or adjoining the park they are actively controlled. Occasionally infestations are found up to 40m from roads and visitor nodes. An infestation of gamba grass *Andropogon gayanus* is thought to have been locally eradicated.

Rat's tail grasses *Sporobolus* spp., guinea grass *Megathyrsus maximus* var *maximus*, red natal grass *Melinis repens*, snake weed *Stachytarpheta* spp. and wild passion vine *Passiflora foetida* are restricted to the camping and day-use areas. These are actively controlled.

Navua sedge *Cyperus aromaticus* occurs in disturbed creek bank areas near the campground but is increasing in the wetter areas.

Other grassy pest plants found along the road and campground include *Hyparrhenia* sp. and *Pennisetum* sp.

Pest animals

Feral pigs *Sus scrofa*, wild dogs *Canis familiaris*, cats *Felis catus*, rabbits *Oryctolagus cuniculus* and feral cattle *Bos* spp. are known to occur on the park. Feral pigs may have a negative effect on the northern bettong due to rooting damage and competition for feeding on fungal fruit-bodies (Laurance 1997).

Fire management

Fire is used to achieve the primary ecological objective to maintain the integrity, structure and health of the vegetation, thereby increasing resilience to events such as cyclones, climate change and weed invasion. Habitat management to promote suitable habitat for the northern bettong is a paramount consideration.

Other management issues

Firewood collection is not permitted. Unauthorised collection of firewood may be negatively impacting shade trees in high use areas.

References

Laurance, W.F. 1997 A distributional survey and habitat model for the endangered northern bettong *Bettongia tropica* in tropical Queensland, *Biological Conservation* **82**, 47–60.

Smith, N. 1995 *Weeds of Natural Ecosystems: a field guide to environmental weeds of the Northern Territory*, NT Environment Centre.

Management directions

Desired outcomes	Actions and guidelines
<p>Native plants and animals</p> <p>Information on the occurrence and distribution of plant and animal communities continues to be sufficient for management purposes.</p>	<p>A1. Routinely monitor northern bettongs to maintain awareness of population trends in response to management actions.</p> <p>A2. Control invasive plants to ensure retention of native grasses and avoidance of high biomass grasses.</p>
<p>Aboriginal culture</p> <p>Djabugay people play an important role in natural resource management and the conservation, protection and appropriate interpretation of their cultural heritage.</p>	<p>A3. Develop guidelines for the management of significant cultural sites, in conjunction with Djabugay people.</p> <p>A4. Liaise with Djabugay people on issues of visitor management, natural resource management, and cultural heritage interpretation.</p>

Tables – Conservation values management

Table 1: Endangered and of concern regional ecosystems

Regional ecosystem number	Description	Biodiversity status
7.3.26a	Riverine wetland or fringing riverine wetland. <i>Casuarina cunninghamiana</i> , <i>Eucalyptus tereticornis</i> , <i>Lophostemon suaveolens</i> , <i>Melaleuca leucadendra</i> , <i>M. fluviatilis</i> , <i>Buckinghamia celsissima</i> , <i>Mallotus philippensis</i> woodland and forest with an understorey of <i>Melaleuca viminalis</i> and <i>Bursaria tenuifolia</i> . Fringing forests of larger streams.	Endangered
7.3.28d	Riverine wetland or fringing riverine wetland. Unvegetated rock. Creek beds and banks. Rivers and streams including riparian and shrubland on river and stream bed alluvium, and rock within stream beds	Endangered
7.3.49a	Riverine wetland or fringing riverine wetland. <i>Tristaniopsis exiliflora</i> and <i>Xanthostemon chrysanthus</i> layered open-forest, and closed-forest. Common associated species include <i>Grevillea baileyana</i> , <i>G. hilliana</i> , and <i>Blepharocarya involucrigera</i> . Rubble terraces of streams.	Of concern
7.11.35a	<i>Eucalyptus portuensis</i> , <i>E. drepanophylla</i> , <i>Corymbia intermedia</i> , <i>C. citriodora</i> , <i>Lophostemon suaveolens</i> woodland to low woodland with <i>Melaleuca viridiflora</i> , <i>Acacia flavescens</i> and <i>Allocasuarina littoralis</i> . Uplands and highlands on metamorphics, of the dry rainfall zone.	Of concern
7.12.55	<i>Eucalyptus leptophleba</i> (Molloy red box) woodland to open-forest. Foothills and uplands on granite and rhyolite, of the dry rainfall zone.	Of concern
7.12.65k	Bare granite and rhyolite rock, of dry western areas, associated with shrublands to closed forests of <i>Acacia spp.</i> (wattles) and/or <i>Lophostemon suaveolens</i> (swamp mahogany) and/or <i>Allocasuarina littoralis</i> (black sheoak) and/or <i>Eucalyptus lockyeri</i> subsp. <i>exuta</i> . Dry western areas. Granite and rhyolite.	Of concern

Table 2: Species of conservation significance

Scientific name	Common name	Nature Conservation Act 1992 status	Environment Protection and Biodiversity Conservation Act 1999 status	Back on Track status
Plants				
<i>Calochlaena villosa</i>	-	Near threatened	-	Low
<i>Gossia lucida</i>	-	Near threatened	-	Low
<i>Ramphicarpa australiensis</i>	-	Near threatened	-	Low
<i>Schizomeria whitei</i>	white birch	Near threatened	-	Not assessed

Scientific name	Common name	Nature Conservation Act 1992 status	Environment Protection and Biodiversity Conservation Act 1999 status	Back on Track status
Animals				
<i>Bettongia tropica</i>	northern bettong	Endangered	Endangered	Critical
<i>Litoria nannotis</i>	waterfall frog	Endangered	Endangered	Low
<i>Litoria rheocola</i>	common mistfrog	Endangered	Endangered	Low
<i>Taudactylus acutirostris</i>	sharp snouted dayfrog	Endangered	Extinct	Low
<i>Nyctimystes dayi</i>	Australian laceid	Endangered	Endangered	Low
<i>Turnix olivii</i>	buff-breasted button-quail	Vulnerable	Endangered	Data deficient
<i>Dasyurus hallucatus</i>	northern quoll	Least concern	Endangered	Medium
<i>Aerodramus terraereginae</i>	Australian swiftlet	Near threatened	-	Low

Table 3: Species listed in international agreements

Scientific name	Common name	Bonn	JAMBA	ROKAMBA	CAMBA
<i>Acrocephalus australis</i>	Australian reed-warbler	✓	-	-	-
<i>Coracina tenuirostris</i>	cicadabird	-	✓	-	-
<i>Merops ornatus</i>	rainbow bee-eater	-	✓	-	-
<i>Symposiarchus trivirgatus</i>	spectacled monarch	✓	-	-	-
<i>Rhipidura rufifrons</i>	rufous fantail	✓	-	-	-

Bonn – Bonn Convention

CAMBA – China–Australia Migratory Bird Agreement

JAMBA – Japan–Australia Migratory Bird Agreement

ROKAMBA – Republic of Korea–Australia Migratory Bird Agreement