

# Pidna National Park Management Statement 2013

<b>Park size:</b>	<b>160ha</b>
Bioregion:	South Eastern Queensland
QPWS region:	South West
Local government estate/area:	Toowoomba Regional Council
State electorate:	Nanango

## Legislative framework

✓	<i>Aboriginal Cultural Heritage Act 2003</i>
✓	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>
✓	<i>Native Title Act 1993 (Cwlth)</i>
✓	<i>Nature Conservation Act 1992</i>

## Thematic strategies

✓	Level 2 fire management strategy
✓	Level 2 pest management strategy

## Vision

Pidna National Park will be managed to conserve the natural and scientific values of the park by maintaining its natural processes and high species richness. It will be preserved by limiting threatening processes such as invasive pests and inappropriate burning practices.

## Conservation purpose

One hundred and fifty hectares (ha) of Pidna State Forest (SF379) was declared a Scientific Area (SA43) in the early 1970s, due to its high level of biodiversity. On 2 June 2006, it was gazetted as Pidna National Park. The park is managed to preserve its high conservation value including three of concern regional ecosystems, noteworthy plant species and its recognition as a wildlife refuge.

## Protecting and presenting the park's values

### Landscape

Pidna National Park lies 3.8 kilometres (km) from Yarraman Township, in the Upper Brisbane Catchment. The terrain is hilly with shallow soils derived from metamorphosed sediments and igneous basalts and supports mostly grassy eucalyptus woodland, with a thin band of hoop pine rainforest on its western boundary. There is a creek that runs through the park and into Cooyar Creek, which flows into the upper section of the Brisbane River via Cooyar River.

The park borders Pidna State Forest on three sides and offers habitat connectivity within a large island of native forest and plantation surrounded by grazing lands. Logging in the adjacent State forest, however, has the potential to cause loss in habitat connectivity.

A gazetted road and powerline easement traverse the park. The park also contains a gravel pit and two unoccupied apiary sites.

## Regional ecosystems

The park conserves seven regional ecosystems, five of which are of concern under their biodiversity status (Table 1). These are remnants of a once broader vegetated landscape that has been extensively cleared for agriculture. As such they each comprise special conservation values as regionally significant wildlife refugia.

Most of the park is covered in dry narrow-leaved ironbark *Eucalyptus crebra* and forest red gum *E. tereticornis* woodland with, predominantly, a grassy understorey. A small remnant of Araucarian complex microphyll vine forest grows along the north-western boundary. This of concern community has a restricted occurrence and is characteristic of the Yarraman-Tarong-Boat Mountain area. Remnants are easily degraded by pest plants and wildfire.

## Native plants and animals

Twenty birds, one mammal and 28 plant species have been recorded on the park, of which one plant, Bailey's cypress *Callitris baileyi* is of conservation significance (Table 2). Bailey's cypress is listed as near threatened under the *Nature Conservation Act 1992*. It grows sporadically on rocky hillsides amongst dry eucalypt species such as ironbark, forest red gum and spotted gum (Burnett area) or as an ecotonal species adjacent to and growing in rainforest (Bunya Mountains). It has a limited range, inhabiting restricted locations in the south-west part of South East Queensland (as well as small populations in north-east NSW). In Pidna National Park it is found in the ironbark/forest red gum woodland.

Inappropriate fire regimes threaten individual Bailey's cypress plants and cause habitat degradation. This occurs either through too frequent fire where individuals are killed and recruitment is impeded or, in the absence of fire, where colonising species such as wattles and grass species out-compete cypress populations. Pest plant invasion is also a major threat to the species, through competition, habitat loss and degradation. Land clearing for grazing has led to a decline in the species.

## Aboriginal culture

Wakka Wakka, Jarowair and Western Wakka Wakka peoples occupied and moved through the South Burnett and Brisbane Valley region. There are many sites of Aboriginal cultural importance throughout the area but there are no records on the park. There is no current native title claim over Pidna National Park.

Opportunities exist to improve relationships with local Traditional Owner groups and involve them in park management.

## Shared-history culture

The South Burnett region has a history of logging and clearing for agriculture since the 1800s. The first patches of hoop pine vine scrub in Pidna State Forest (SF379) were cleared and planted with a hoop pine mono-culture in 1948. From 1950 to 1986 most of the hoop pine scrub in SF375 was converted to softwood plantation leaving only a thin scrub buffer.

In the early 1970s a section of forest in the south-west was recognised as being biologically significant and was set aside as a scientific area (SA70). Under the South East Queensland Forests Agreement, it was gazetted as national park.

## Tourism and visitor opportunities

Pidna National Park has no visitor infrastructure. While there are no designated walking tracks in the national park, the powerline easement and roads provide access for enjoying nature-based recreation on foot. Mountain bikes use the powerline easement and roads and tracks through the State forest.

## Education and science

Currently, there are no scientific studies being undertaken on the park. There is potential to monitor the condition of the vine scrub as an of concern remnant habitat and to carry out research on the near threatened Bailey's cypress.

## Partnerships

Queensland Parks and Wildlife Service (QPWS) engages with the Department of Agriculture, Fisheries and Forestry, Forest Products Queensland, Powerlink Queensland and neighbouring land owners in managing issues of mutual concern such as fire and pest management.

## Other key issues and responses

### Pest management

The park is widely infested with lantana *Lantana camara* which has invaded both open and closed forest communities. This weed poses a significant threat to forest integrity as it suppresses native plant recruitment and increases the fire fuel load.

Mother-of-millions *Bryophyllum tubiflorum* also occurs on the northern boundary bordering the State forest in the dry woodland. It has been controlled in the past with chemical spraying.

Cattle encroachment into the park potentially impacts on forest integrity through consumption of understorey plants, spreading pest plant species and trampling, particularly in the eastern side gully.

Cats *Felis catus* and foxes *Vulpes vulpes* are also present in the park and control measures are undertaken. There is a current Level 2 pest management strategy in place for Kingaroy South Management area which includes Pidna National Park.

### Fire management

Pidna National Park is subject to frequent fire from neighbouring properties. The thin band of vine scrub and the cypress pine are both susceptible to inappropriate fire regimes. There is a current Level 2 fire management strategy in place for Kingaroy South management area that includes Pidna National Park.

### Other management issues

A powerline easement runs north-south through the park and maintenance is the power company's responsibility. However, as a cleared corridor, it is susceptible to weeds which then colonise along the edges of the park's open forest. The easement also allows stock movement through the park.

There are Exploration Permits for Minerals over the north-western corner of the estate, and a Coal Exploration Permit over the whole estate that may result in extraction from the neighbouring State forest. Note that legislation prevents mining under national park tenure.

## Management directions

Desired outcomes	Actions and guidelines
<p><b>Landscape</b></p> <p>Knowledge of the landscape and ecological processes is increased.</p>	<p>A1. Conduct plant and animal surveys in open forest and vine forest to establish baseline data for future management directions.</p>
<p><b>Pest management</b></p> <p>Impacts of pests are minimised without compromising the natural integrity of the park.</p>	<p>A2. Engage with neighbours and Powerlink to reduce impacts of pest plants and animals on estate and neighbouring land.</p> <p>A3. Implement and review the Level 2 pest management strategy.</p> <p>A4. Investigate methods for managing stock encroachment into the park.</p>

Desired outcomes	Actions and guidelines
<p><b>Fire management</b></p> <p>Fire is managed to protect life and property and ecosystem integrity.</p>	<p>A5. Manage Bailey's cypress habitat with appropriate fire regime.</p> <p>A6. Maintain forest ecosystem condition and diversity with appropriate burning practices identified in the Level 2 fire management strategy.</p>
<p><b>Aboriginal culture</b></p> <p>Traditional Owners have meaningful involvement with park management planning and direction.</p>	<p>A7. Encourage Traditional Owners to identify and document values, sites, artefacts and places of cultural heritage significance so that management strategies and decisions relating to fire regimes, access and track maintenance minimise potential threats to these values.</p>

## Tables – Conservation values management

**Table 1: Endangered and of concern regional ecosystems**

Regional ecosystem number	Description	Biodiversity status
12.8.13	Araucarian complex microphyll vine forest on Cainozoic igneous rocks	Of concern
12.8.16	<i>Eucalyptus crebra</i> , <i>E. tereticornis</i> woodland on Cainozoic igneous rocks	Of concern
12.9-10.7	<i>Eucalyptus crebra</i> woodland on sedimentary rocks	Of concern
12.9-10.18	<i>Angophora leiocarpa</i> , <i>Eucalyptus crebra</i> woodland on sedimentary rocks	Of concern
12.11.14	<i>Eucalyptus crebra</i> , <i>E. tereticornis</i> woodland on metamorphics +/- interbedded volcanics	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
<i>Callitris baileyi</i>	Bailey's cypress	Near threatened	-	High