

Kroombit Area Management Statement 2013

Park size:	Dawes National Park	7,643ha
	Dawes National Park (Recovery)	1,267ha
	Kroombit Tops National Park	43,260ha
	Castle Tower National Park	8,511ha
	Dan Dan National Park	1,645ha
	Wietalaba National Park (Recovery)	1,829ha
	Futter Creek Conservation Park	36.9ha
	Degalgil Forest Reserve	5ha
	Mount Stanley Forest Reserve 2	1,000ha
	Boyne Range State Forest	325.46ha
	Calliope Range State Forest	214ha
	Dan Dan State Forest	4,634ha
	Degalgil State Forest	688ha
	Glassford State Forest	1,769ha
	Maxwelton State Forest	1,697ha
	Pine Mountain State Forest	597.38ha
	Wietalaba State Forest	2,210ha
Pemberton State Forest	411.38ha	
Bioregion:	South Eastern Queensland	
QPWS region:	Sunshine and Fraser Coast	
Local government estate/area:	Gladstone Regional Council North Burnett Regional Council	
State electorate:	Gladstone and Callide	



Kroombit tinkerfrog *Taudactylus pleione*. Photo: NPRSR.

Legislative framework

a	<i>Aboriginal Cultural Heritage Act 2003</i>
a	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i>
a	<i>Forestry Act 1959</i>
a	<i>Native Title Act 1993 (Cwlth)</i>
a	<i>Nature Conservation Act 1992</i>
a	<i>Queensland Heritage Act 1992</i>

Plans and agreements

a	Bonn Convention
a	China–Australia Migratory Bird Agreement
a	Japan–Australia Migratory Bird Agreement
a	National multi-species recovery plan for the cycads
a	National recovery plan for the black-breasted button-quail <i>Turnix melanogaster</i>
a	Recovery plan for stream frogs of south-east Queensland
a	Republic of Korea–Australia Migratory Bird Agreement

Thematic strategies

a	Level 1 Fire Management Strategy
a	Level 2 Pest Management Strategy
a	Kroombit Visitor Management Strategy

Vision

The natural ecosystems and populations of native plants and animals within the Kroombit area are conserved.

The Kroombit area is managed with an increased understanding of the diversity of natural environments and processes, ensuring significant geology, catchments, species and communities are protected and impacts are minimised.

Partnerships are established with the Traditional Owners, local community, neighbours, research institutes, conservation groups and Queensland Fire and Rescue Service to contribute to the area's ongoing management.

Recreation opportunities will be developed in response to visitor demand in keeping with the natural environment.

Conservation purpose

The objectives of management for the Kroombit management area are to:

- conserve and protect regional ecosystems and species of conservation significance and their habitats and the natural processes that sustain them
- minimise the impact of pests and inappropriate fire regimes on the natural environment
- incorporate the interests and rights of the Traditional Owners and their affiliations to the area by cooperatively protecting and managing cultural heritage of significance
- encourage and promote outdoor recreation activities in the Kroombit management area
- provide direction and actions to protect the natural, cultural and social values of the area through appropriate research and monitoring
- foster cooperative relationships with relevant stakeholders to build stronger partnerships to assist management.

Protecting and presenting the area's values

Landscape

Kroombit Tops National Park is 85km south-west of Gladstone. The geological features of the area started to form 215 million years ago from volcanic activity. The area was covered by the ocean 25 million years ago which created sand beds that compressed to form sandstone. Kroombit Tops is capped by precipice sandstone (Lower Jurassic) on older Muncon volcanics (Triassic). Kroombit Tops National Park is now a scenic tableland with towering sandstone cliffs, steep-sided gullies and deep gorges where rainforests grow. The park includes the plateau at the junction of the Dawes, Milton and Calliope ranges. The plateau is approximately 800m above sea level rising to 930m at Amy's Peak and to a maximum altitude of 940m on the ridge between Kroombit and Dry Creek valleys. The Kroombit, Dry and Callide creeks all flow west into the agricultural Callide Valley. The headwaters of Three Moon Creek begin in Kroombit Tops and flow south-west to the Burnett River.

Dawes National Park (Recovery) lies on the northern border of the Burnett River Catchment and the southern border of the Boyne River Catchment. The landscape contains localised basalt and mixed sedimentary volcanics with small areas of elevated sedimentary hills, ranges and alluvial valleys. The north-eastern border is buffered by steep granite ridgelines which are susceptible to erosion. The adjoining Pine Mountain State Forest was extensively cleared in preparation for pine plantation; however the pine was never established. The park is located approximately 25km north-east of Monto and 150km north-west of Bundaberg.

In 2001, a 1,267ha portion of the 1,864ha Pine Mountain State Forest was converted to Dawes Forest Reserve 1. The forest reserve was then gazetted as Dawes National Park (Recovery) in 2006 to protect its eucalyptus woodlands, in particular the endangered regional ecosystem *Eucalyptus tereticornis* woodland to open-forest (RE 12.3.3). The park is significant for the region because the surrounding area, including the remaining 597 ha Pine Mountain State Forest, were completely cleared. The park protects an island of endangered remnant vegetation.

Castle Tower National Park and Mount Stanley Forest Reserve 2 are located 70km from Gladstone. The national park and forest reserve are two large granite outcrops that are flanked by towering granite cliffs. Panoramic views over the Boyne Valley and Gladstone are visible from their summits.

Regional ecosystems

There are 68 regional ecosystems in the management area, with 33 listed as of concern and three listed as endangered as described in Table 1.

The diverse range of vegetation communities in Kroombit Tops National Park supports a variety of wildlife. Kroombit Tops as a whole is biogeographically significant as it is a temperate 'island' in the subtropical zone (McDonald and Sharpe 1986).

Plants and animals

The Kroombit management area protects a wide range of communities and habitats. The area provides habitat for 33 significant native plant species and 19 significant native animal species, listed under state legislation (Table 2).

Dawes National Park (Recovery) contains several threatened and near threatened species. The dry vine scrub communities with their ecotones are habitat for several species of conservation significance, including the vulnerable black-breasted button-quail *Turnix melanogaster*. The eucalyptus woodlands also contain the endangered *Cycas megacarpa*. Both species have national recovery plans which outline the threatening processes and recovery objectives for their management. Blue gum *Eucalyptus tereticornis* grows into a very large hollow-forming tree and has a special significance for native animal species, especially in drier areas.

The area represents a northern outlier in the distribution of species such as coachwood *Ceratopetalum apetalum*. In addition, several species are known only from Kroombit Tops, such as the critically endangered Kroombit tinkerfrog *Taudactylus pleione*, the endangered Kroombit treefrog *Litoria kroombitensis* or the Dawes Range, such as the Kroombit spiny cray *Euastacus monteithorum*. There is evidence of decline in the Kroombit treefrog. Other significant native animals include the red goshawk *Erythrotriochis radiatus*, powerful owl *Ninox strenua*, glossy black-cockatoo *Calyptorhynchus lathami*, Semon's leaf-nosed bat *Hipposideros semoni* and coastal sheath-tail bat *Taphozous australis*. Through ongoing surveys, a total of 87 butterfly species have been recorded.

Castle Tower National Park and Mount Stanley Forest Reserve 2 are dominated by open eucalypt woodlands with a shrubby understorey. The summits on Mount Stanley support montane heath populations. The Byfield spider grevillea *Grevillea venusta* can be found in the national park and State forest. This plant is only found locally and currently threatened with extinction. Dry rainforest scrub grows along the gullies and creeks. The park is the southern limit of poplar gum *Eucalyptus platyphylla*.

Dan Dan National Park, Wietalaba National Park (Recovery) and Dan Dan State Forest are dominated by semi-evergreen vine thickets and lemon scented gum *Corymbia citriodora* and narrow-leaved ironbark *Eucalyptus crebra* open forests. The eucalyptus forests support populations of squirrel gliders *Petaurus norfolcensis* and greater gliders *Petauroides volans*. Dan Dan State Forest protects the vulnerable *Acacia eremophiloides*, a small shrub that grows in open forest or woodland.

Aboriginal culture

The management area is under the native title claim by the Port Curtis Coral Coast Indigenous Group (QUD6026/01 and QC01/09). The Port Curtis Coral Coast Indigenous Group represent the Bailai, Gooreng Gooreng and Gurang people who have a cultural connection to the Kroombit management area. Kroombit Tops National Park is believed to be a spiritually taboo area for the Aboriginal people of the area.

A memorandum of understanding exists between the Gidarjil Development Corporation (on behalf of the Gurang and Gooreng Gooreng people) and the Queensland Parks and Wildlife Service (QPWS). This memorandum of understanding was established in March 2010 to foster a coordinated and cooperative partnership in the use and management of QPWS estate that are in the Port Curtis Coral Coast native title claim area.

Traditional Owners are an important part of effectively managing the area as they have a strong desire for continued involvement in its cultural and sustainable use. It is important for QPWS to continue to work with Traditional Owners to identify cultural connections and ensure appropriate measures are taken to protect known sites in the area. QPWS will work towards ensuring Traditional Owners are actively participating in the day-to-day management and that cultural heritage is protected by maintaining relationships with the Traditional Owners.

Shared-history culture

Historically gold mining, timber harvesting and grazing have been the primary uses of the land in the management area since the 1840s (Johnston 1982). Remnants of grazing infrastructure such as shacks, yards and dips remain with some still used by grazing authority holders where leases still occur. Unused grazing infrastructure is in poor condition and is being allowed to degrade naturally.

A road built between 1964 and 1968 opened Kroombit Tops for logging. From 1969 to 1995 hoop pines and hardwoods were harvested for timber.

Beautiful Betsy, a World War II B-24 Liberator bomber crashed at Kroombit Tops in 1945 and lay undiscovered for nearly 50 years, until discovered by QPWS staff in 1994. The area is now managed as a heritage site, and all parts of the wreck are protected.

Part of Dawes National Park was once a small gold mining town. Remnants of the township still remain in the area.

Tourism and visitor opportunities

Protected areas throughout Queensland offer a range of visitor opportunities to cater for different types of visitors. These opportunities range from a safe and comfortable experience with access to developed facilities through to challenging, wild places away from any sign of development. The population in the Gladstone area is expected to double by 2031 and is recognised as the fourth fastest growing local government in Queensland.

Kroombit Tops National Park offers visitors an alternative natural experience to the coastal parks in the area. Kroombit Tops provides a range of experiences such as four-wheel driving, walking tracks and remote and self-reliant bush camping opportunities. The park is expected to become the regions most recognised and sustainable recreation and ecotourism destination. The park will move from a self-reliant experience to a destination that has low key developments and low to moderate levels of use (Tourism Potential Pty Ltd 2010).

The Bicentennial National Trail traverses Kroombit Tops National Park. Three campsites are designated along the trail, Razorback Gate, Griffiths Creek Yards and South of Lookout. Users, including horse riders, require permits to access the trail.

The other estate in the Kroombit management area provides a more remote, self-reliant visitor experience. Remote bushwalking, photography, bird watching and bush camping are all opportunities throughout the other estate.

Access to some of these areas may be through private lands and/or four-wheel drive roads. Visitors are advised to obtain up-to-date information prior to accessing these parks.

Education and science

The management area provides opportunities for scientific research and monitoring. Results from research and monitoring can benefit the area's management and educate staff and the community.

Since the mid-1900s there has been ongoing research on the Kroombit tinkerfrog, including a FrogSearch during summer season. FrogSearch relies on volunteers to assist QPWS with surveying and monitoring of species (Hines 2011).

Further surveys would inform management of the protection of flora and fauna species, thereby reducing the impact of threatening processes of inappropriate fire regimes, pest animal and plant species.

Partnerships

QPWS is responsible for planning, managing and regulating activities in the management area. Working with neighbours, Queensland Fire and Rescue Service, Traditional Owners, commercial operators, Bicentennial National Trail, council, lessees, user groups, Fitzroy Basin Association and individuals with similar interests in managing the area is highly desirable to achieve the vision. Where possible, efficiencies in resource sharing, improved communications, decision making and enhanced on-ground outcomes is to be facilitated through working partnerships.

QPWS has a working relationship with Queensland Rural Fire Service, neighbours, lessees and local community and conservation groups for cooperative management of fire, pests and cattle management.

Other key issues and responses

Pest management

A current Level 2 pest management strategy is approved for Kroombit Tops and Dan Dan national parks and Dan Dan State Forest. This strategy helps to prioritise pest plant and animal control actions and guide operational work plans and evaluate program effectiveness on QPWS managed areas.

Lantana *Lantana camara* was first recorded in the immediate area in 1930 and is a major issue within the Dawes National Park (Recovery) and the adjoining Pine Mountain State Forest. Large tracts of lantana have invaded the native vegetation impacted by wildfires, which is also a major threatening process to black-breasted button quail habitat as well as facilitating fire spreading into vine scrub. Lantana is found throughout Kroombit management area. Kroombit Tops National Park has large areas of lantana infestations. Lantana has the potential to increase fire intensity, stall rainforest regeneration through competition and alter the invertebrate community (Kroombit tinkerfrog food) (Hines 2011).

Pigs *Sus scrofa* are a major threat for Kroombit Tops National Park. Feral pigs are declared a Class 2 pest animal under the *Land Protection (Pest and Stock Route Management) Act 2002*. Pig damage has been seen along all roads, tracks, streams and throughout the interior of these areas where large tracts of vegetation is disturbed. There is a possibility that the habitats of the endangered Kroombit treefrog, Kroombit tinkerfrog and the Kroombit spiny cray are impacted by pigs wallowing and feeding in perennial seeps and waterways particularly in the dry periods. A pig control program is in place at Kroombit Tops with ongoing monitoring, trapping and baiting being conducted.

Rubbervine *Cryptostegia grandiflora* is a threat to Kroombit management area. Rubbervine is a Class 2 pest plant within the Weeds of National Significance database. There are scattered plants throughout the area. The aim is to map the existing infestation and treat isolated plants where required.

Parthenium *Parthenium hysterophorus* is a threat to the management area. It is a declared Class 2 pest plant within the Weeds of National Significance database. Parthenium occurs on disturbed areas including roads and fire control lines. Parthenium is found on Dan Dan State Forest, the south-western boundary of Kroombit Tops National Park and on Futter Creek Conservation Park. The aim is to chemically control the infestations to manage further spread.

Buffel grass *Cenchrus ciliaris*, giant rats-tail grass *Sporobolus pyramidalis* and green panic *Megathyrsus maximus* var. *publiglumis* are considered a threat to the management area. These perennial grasses can colonise large areas, alter fire regimes and displace native species. The aim is to monitor the spread and treat where required. Dawes National Park (Recovery) has a significant population of green panic is also well established within the park and is likely to be spread by cattle and wildfires.

Cattle *Bos taurus* and horses *Equus caballus* are considered a moderate threat in the Kroombit management area. They create significant grazing pressure, particularly following fires, on selected native grass species and spread weed seed, particularly parthenium, buffel and giant rat's tail grass. Hoofed animals have an impact on riparian zones including compaction, erosion and trampling of sensitive vegetation. The aim is to continue the trapping and mustering program and negotiate with neighbours to secure boundary fences. Branded stock not authorised to graze on estate will be returned to the owners if appropriate or seized under the Nature Conservation Act.

Large numbers of pest animals recorded in the management area include cats *Felis catus*, foxes *Vulpes vulpes*, rabbits *Oryctolagus cuniculus* and wild dogs *Canis lupus familiaris*. Cats and foxes pose a significant threat to the black-breasted button quail.

Fire management

QPWS has a statewide fire management system. QPWS is the primary agency for fire management on protected areas and State forests. Fire strategies provide the overall framework and direction for fire management and are the foundation from which planned burn programs are developed. A Level 1 fire management strategy for Kroombit Tops National Park was completed in 2005.

The main threat to the Kroombit management area is inappropriate fire regimes and wildfires. The long-term fire management aims for the area are to maintain the current diversity of native flora and fauna species while allowing for natural change and facilitating self-adaption with climate change to ensure the conservation of fire sensitive ecosystems and species. Fire sensitive vegetation communities occur across the management area such as rainforests and vine thickets. Fire will be excluded from these areas to maintain the vegetation composition and structure.

Fire management on leases over State forests is managed by QPWS in cooperation with the lessees. A coordinated approach to fire management with surrounding neighbours will be maintained to ensure fire is managed appropriately.

QPWS will continue to build and maintain partnerships with the Queensland Fire and Rescue Service (including the Rural Fire Service), Councils and neighbours in relation to managing fire.

Authorities

Grazing authorities are in place for Dawes National Park (Recovery), Castle Tower, Kroombit and Wietalaba national parks, Mount Stanley Forest Reserve 2, Degalgil Forest Reserve, Dagalgil, Pine Mountain, Wietalaba, Maxwellton State forests. Exploration and mineral development approvals exist over the Kroombit Management Area.

Exploration permits and mineral development licences are assessed in accordance with the *Environmental Protection Act 1994* and *Mineral Resources Act 1989*. All mining, exploration permits and licences issued on QPWS estate are assessed by the Department of Natural Resources and Mines with advice from QPWS in relation to management of sensitive areas and protection of significant species, habitat and biodiversity values.

An Ergon Energy power line easement traverses Wietalaba State Forest and Pemberton State Forest.

Authorities may be issued under the Nature Conservation Act sections 34–38 to allow certain types of infrastructure on protected area estate. These authorities can be used for public service facilities and they are most commonly used to enable infrastructure to be built or remain on a protected area. Authorities in the management area must be consistent with this management statement and relevant policies and be issued in accordance with the Nature Conservation Act and the *Forestry Act 1959*.

A community safety tower and Sunwater infrastructure are located on Kroombit Tops National Park and are authorised under Section 35 of the Nature Conservation Act. Gladstone Amateur Radio Club is authorised under an occupation permit for a tower on Kroombit Tops National Park.

References

Hines H. 2011 *Management of the critically endangered Kroombit tinkerfrog*, Final report for Fitzroy Basin Association Activity Agreement FB TQBL 01.03, Queensland Government.

Johnston W.R. 1982 *A New Province? The Closer Settlement of Monto, Brisbane*. Booralong Publications for the Monto Shire Council.

McDonald W.J.F. and Sharpe P.R. 1986 The plant communities and flora of Kroombit Tops. *The Queensland Naturalist* **27**, 3–10.

Tourism Potential Pty Ltd 2010 *Kroombit Tops Development Feasibility Study*, prepared in association with Tony Charters and Associates and GHD, prepared for Gladstone Area Promotion and Development Limited.

Management directions

Desired outcomes	Actions and guidelines
<p>Landscape</p> <p>The landscape is protected, particularly areas of high scenic quality or traditional or cultural significance, while allowing natural processes to continue.</p> <p>The full range of naturally occurring biological diversity, ecological processes and landscape dynamics are maintained.</p>	<p>A1. Monitor the impacts from natural processes, pests, fire and recreation. Use the information to guide management decisions and amend current and future plans and strategies.</p> <p>A2. Ensure any activities are consistent with the high scenic landscape values. Activities that compromise these values, and cannot be mitigated or managed, will not be permitted.</p>
<p>Native plants and animals</p> <p>The diversity of native plant and animal populations is retained and species of conservation significance fostered on the protected areas.</p>	<p>A3. Monitor and update the pest strategy noting to:</p> <ul style="list-style-type: none"> · conduct a comprehensive plant and animal survey in the management area where required · continue to monitor the Kroombit tinkerfrog population, and the breeding biology · monitor the threatening processes of the Kroombit tinkerfrog, including the removal of grazing in known habitat areas, lantana removal and feral pig control · implement and review the fire management strategy.
<p>Authorities</p> <p>Facilities and authorities in the management area are correctly authorised under the relevant legislation and do not significantly impact on the areas values.</p>	<p>A4. Ensure that future leases and permits for grazing in the management area are consistent with this statement and other management strategies and are issued in accordance with the Forestry Act and the Nature Conservation Act.</p> <p>A5. Monitor the impacts of grazing in areas that are showing signs of degradation and develop strategies to minimise impact.</p>
<p>Tourism and visitor opportunities</p> <p>Visitor use provides for self-reliant experience without impacting on the natural and cultural values of the Kroombit management area.</p>	<p>A6. Increase and diversify visitor infrastructure within Kroombit Tops National Park to cater for increasing visitor demand.</p>

Desired outcomes	Actions and guidelines
<p>Partnership</p> <p>The effectiveness of future management is strengthened through cooperative partnerships.</p>	<p>A7. Continue to build relationships with the local community, organisations, visitors and interest groups to improve knowledge of the management area, and to highlight its significance to the region.</p> <p>A8. Encourage and support Traditional Owners in conducting a comprehensive cultural heritage survey including recording sites, stories, language names and cultural heritage places.</p> <p>A9. Encourage and allow access for the implementation of research programs, particularly those that will benefit conservation management. Incorporate new information about threatened plants, animals or communities into plans and strategies and WildNet.</p>

Tables – Conservation values management

Table 1: Endangered and of concern regional ecosystems

Protected area	Regional ecosystem number	Description	Biodiversity status
Dan Dan State Forest	11.3.2	<i>Eucalyptus populnea</i> woodland on alluvial plains	Of concern
Kroombit Tops National Park. Calliope Range and Dan Dan State forests	11.3.4	<i>Eucalyptus tereticornis</i> and/or <i>Eucalyptus</i> spp. tall woodland on alluvial plains	Of concern
Kroombit Tops National Park	11.3.6	<i>Eucalyptus melanophloia</i> woodland on alluvial plains	Of concern
Kroombit Tops National Park, Dan Dan State Forest	11.3.25	<i>Eucalyptus tereticornis</i> or <i>E. camaldulensis</i> woodland fringing drainage lines	Of concern
Kroombit Tops National Park	11.3.27	Freshwater wetlands. Vegetation is variable including open water with or without aquatic species and fringing sedgelands and eucalypt woodlands. Occurs in a variety of situations including lakes, billabongs, oxbows and depressions on floodplains.	Of concern
Kroombit Tops National Park. Dan Dan State Forest	11.11.10	<i>Eucalyptus melanophloia</i> woodland on deformed and metamorphosed sediments and interbedded volcanics	Of concern
Castle Tower National Park	11.12.5	<i>Corymbia</i> spp., <i>Lysicarpus angustifolius</i> , <i>Eucalyptus crebra</i> , <i>E. cloeziana</i> woodland on igneous rocks (granite).	Of concern
Kroombit Tops National Park	12.3.1	Gallery rainforest (notophyll vine forest) on alluvial plains	Endangered
Castle Tower and Kroombit Tops national parks, Dawes National Park (Recovery). Glassford and Pine Mountain State forests	12.3.3	<i>Eucalyptus tereticornis</i> woodland to open-forest on alluvial plains.	Endangered
Kroombit Tops National Park	12.8.18	Simple notophyll vine forest with <i>Ceratopetalum apetalum</i> on Cainozoic igneous rocks	Of concern
Kroombit Tops National Park	12.9–10.3	<i>Eucalyptus moluccana</i> on sedimentary rocks	Of concern
Kroombit Tops National Park	12.9–10.7	<i>Eucalyptus crebra</i> +/- <i>E. tereticornis</i> , <i>Corymbia tessellaris</i> , <i>Angophora</i> spp., <i>E. melanophloia</i> woodland on sedimentary rocks	Of concern

Protected area	Regional ecosystem number	Description	Biodiversity status
Kroombit Tops National Park	12.9–10.13	<i>Eucalyptus corynodes</i> woodland on sedimentary rocks	Of concern
Kroombit Tops National Park	12.9–10.20	<i>Eucalyptus montivaga</i> open-forest on sedimentary rocks	Of concern
Kroombit Tops National Park	12.9–10.23	<i>Eucalyptus melanoleuca</i> open-forest on sedimentary rocks	Of concern
Kroombit Tops National Park	12.9–10.24	<i>Eucalyptus suffulgens</i> open-forest on sedimentary rocks	Of concern
Dan Dan, Dawes and Kroombit Tops national parks, Degalgil, Dan Dan and Wietalaba State forests	12.11.4	Semi-evergreen vine thicket on metamorphics +/- interbedded volcanics	Of concern
Dawes and Kroombit Tops national parks. Dan Dan State Forest	12.11.8	<i>Eucalyptus melanophloia</i> , <i>E. crebra</i> woodland on metamorphics +/- interbedded volcanics	Of concern
Dawes National Park (Recovery), Pine Mountain State Forest	12.11.9	<i>Eucalyptus tereticornis</i> open-forest on metamorphics plus interbedded volcanics. Usually higher altitudes.	Of concern
Dawes and Kroombit Tops national parks, Degalgil State Forest	12.11.12	Araucarian complex microphyll vine forest on metamorphics +/- interbedded volcanics; northern half of bioregion	Of concern
Castle Tower and Dan Dan national parks, Mount Stanley Forest Reserve, Wietalaba State Forest	12.11.14	<i>Eucalyptus crebra</i> , <i>E. tereticornis</i> woodland on metamorphics +/- interbedded volcanics.	Of concern
Dawes National Park (Recovery), Kroombit Tops National Park	12.12.1	Simple notophyll vine forest usually with abundant <i>Archontophoenix cunninghamiana</i> ("gully vine forest") on Mesozoic to Proterozoic igneous rocks	Of concern
Kroombit Tops National Park	12.12.4	<i>Eucalyptus acmenoides</i> +/- <i>Syncarpia glomulifera</i> tall open-forest on Mesozoic to Proterozoic igneous rocks, especially granite	Of concern
Kroombit Tops National Park	12.12.5	<i>Corymbia citrodora</i> , <i>Eucalyptus crebra</i> open forest on Mesozoic to Proterozoic igneous rocks.	Of concern
Dawes and Kroombit Tops national parks	12.12.6	<i>Eucalyptus montivaga</i> open-forest on Mesozoic to Proterozoic igneous rocks	Of concern
Kroombit Tops National Park	12.12.7	<i>Eucalyptus crebra</i> woodland on Mesozoic to Proterozoic igneous rocks.	Of concern
Kroombit Tops National Park	12.12.8	<i>Eucalyptus melanophloia</i> woodland on Mesozoic to Proterozoic igneous rocks	Of concern
Castle Tower National Park, Dawes National Park (Recovery)	12.12.9	Shrubby woodland with <i>Eucalyptus dura</i> usually on rocky peaks on Mesozoic to Proterozoic igneous rocks.	Of concern
Kroombit Tops National Park	12.12.10	Shrubland on rocky peaks on Mesozoic to Proterozoic igneous rocks	Of concern
Castle Tower National Park, Mount Stanley Forest Reserve	12.12.12	<i>Eucalyptus tereticornis</i> , <i>E. crebra</i> or <i>E. siderophloia</i> , <i>Lophostemon suaveolens</i> open-forest on Mesozoic to Proterozoic igneous rocks	Of concern

Protected area	Regional ecosystem number	Description	Biodiversity status
Kroombit Tops National Park	12.12.17	Semi-evergreen vine thicket on Mesozoic to Proterozoic igneous rocks; south of bioregion	Endangered
Dawes and Kroombit Tops national parks, Wietalaba National Park (Recovery), Degalgil Forest Reserve, Degalgil and Wietalaba State forests	12.12.18	Semi-evergreen vine thicket on Mesozoic to Proterozoic igneous rocks; north of bioregion	Of concern
Dawes and Kroombit Tops national parks, Dawes National Park (Recovery), Glassford and Pine Mountain State forests	12.12.20	<i>Eucalyptus saligna</i> tall open-forest on Mesozoic to Proterozoic igneous rocks.	Of concern
Dawes National Park (Recovery), Pine Mountain State Forest	12.12.24	<i>Angophora leiocarpa</i> , <i>Eucalyptus crebra</i> woodland on Mesozoic to Proterozoic igneous rocks.	Of concern
Castle Tower and Kroombit Tops national parks, Mount Stanley Forest Reserve	12.12.27	<i>Corymbia trachyphloia</i> , <i>Eucalyptus crebra</i> and <i>Callitris endlicheri</i> woodland on Mesozoic to Proterozoic igneous rocks	Of concern
Kroombit Tops National Park, Dawes National Park (Recovery), Pine Mountain State Forest	12.12.28	<i>Eucalyptus moluccana</i> open-forest on Mesozoic to Proterozoic igneous rocks.	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 species
Plants				
<i>Acacia eremophiloides</i>	-	Vulnerable	Vulnerable	High
<i>Alyxia sharpei</i>	-	Near threatened	-	Low
<i>Apatophyllum olsenii</i>	-	Endangered	Vulnerable	High
<i>Argophyllum nullumense</i>	silver leaf	Near threatened	-	Low
<i>Arytera dictyoneura</i>	-	Near threatened	-	Low
<i>Bertya opponens</i>	-	Least concern	Vulnerable	-
<i>Bosistoa transversa</i>	three-leaved bosistoa	Least concern	Vulnerable	-
<i>Bulbophyllum globuliforme</i>	miniature moss-orchid	Near threatened	Vulnerable	Low
<i>Bulbophyllum weinthalii</i> subsp. <i>striatum</i>	-	Vulnerable	-	Low
<i>Cassinia collina</i>	-	Vulnerable	-	Low
<i>Choricarpia subargentea</i>	giant ironwood	Near threatened	-	Low

Scientific name	Common name	Nature Conservation Act 1992 status	Environment Protection and Biodiversity Conservation Act 1999 status	Back on Track species
<i>Cupaniopsis shirleyana</i>	wedge-leaf tuckeroo	Vulnerable	Vulnerable	High
<i>Cycas megacarpa</i>	-	Endangered	Endangered	Critical
<i>Eucalyptus decolor</i>	-	Near threatened	-	Low
<i>Fontainea venosa</i>	-	Vulnerable	Vulnerable	Low
<i>Graptophyllum excelsum</i>	-	Near threatened	-	Low
<i>Grevillea venusta</i>	-	Vulnerable	Vulnerable	High
<i>Hernandia bivalvis</i>	cudgerie	Near threatened	-	Low
<i>Macropteranthes fitzalanii</i>	-	Near threatened	-	Low
<i>Macropteranthes leiocaulis</i>	-	Near threatened	-	Low
<i>Marsdenia hemiptera</i>	rusty vine	Near threatened	-	Low
<i>Melaleuca formosa</i>	-	Near threatened	-	Low
<i>Muellerina myrtifolia</i>	-	Near threatened	-	Low
<i>Oldenlandia gibsonii</i>	-	Endangered	-	Critical
<i>Parsonsia kroombitensis</i>	-	Vulnerable	-	Low
<i>Persoonia volcanica</i>	-	Near threatened	-	Low
<i>Phyllanthus sauropodoides</i>	-	Near threatened	-	Low
<i>Rhodamnia angustifolia</i>	-	Endangered	-	Medium
<i>Rhodamnia glabrescens</i>	-	Near threatened	-	Low
<i>Senna acclinis</i>	-	Near threatened	-	Low
<i>Sophora fraseri</i>	brush sophora	Vulnerable	Vulnerable	Low
<i>Thismia rodwayi</i>	-	Near threatened	-	Medium
<i>Zieria verrucosa</i>	-	Vulnerable	Vulnerable	Medium
Animals				
<i>Acanthophis antarcticus</i>	common death adder	Near threatened	-	Medium
<i>Accipiter novaehollandiae</i>	grey goshawk	Near threatened	-	Low
<i>Adelotus brevis</i>	tusked frog	Vulnerable	-	Medium
<i>Aerodramus terraereginae</i>	Australian swiftlet	Near threatened	-	Low

Scientific name	Common name	Nature Conservation Act 1992 status	Environment Protection and Biodiversity Conservation Act 1999 status	Back on Track species
<i>Calyptorhynchus lathami</i>	glossy black-cockatoo	Vulnerable	-	-
<i>Dasyurus maculatus maculatus</i>	spotted-tailed quoll (southern subspecies)	Vulnerable	Endangered	High
<i>Delma torquata</i>	collared delma	Vulnerable	Vulnerable	High
<i>Erythrotriorchis radiatus</i>	red goshawk	Endangered	Vulnerable	High
<i>Hipposideros semoni</i>	Semon's leaf-nosed bat	Endangered	Endangered	Medium
<i>Kerivoula papuensis</i>	golden-tipped bat	Near threatened	-	Medium
<i>Litoria kroombitensis</i>	Kroombit treefrog	Endangered	-	Low
<i>Melithreptus gularis</i>	black-chinned honeyeater	Near threatened	-	Low
<i>Ninox strenua</i>	powerful owl	Vulnerable	-	Medium
<i>Ophioscincus cooloolensis</i>	Cooloola snake-skink	Near threatened	-	Low
<i>Phascolarctos cinereus</i> (southeast Queensland bioregion)	koala (southeast Queensland bioregion)	Least concern	Vulnerable	Low
<i>Podargus ocellatus plumiferus</i>	marbled frogmouth	Vulnerable	-	Low
<i>Taudactylus pleione</i>	Kroombit tinkerfrog	Endangered	Critically endangered	High
<i>Turnix melanogaster</i>	black-breasted button-quail	Vulnerable	Vulnerable	Critical
<i>Tyto tenebricosa tenebricosa</i>	sooty owl	Near threatened	-	Low

Table 3: Species listed in international agreements

Scientific name	Common name	BONN	JAMBA	ROKAMBA	CAMBA
<i>Apus pacificus</i>	fork-tailed swift	-	P	P	P
<i>Ardea ibis</i>	cattle egret	-	P	-	P
<i>Ardea modesta</i>	eastern great egret	-	P	-	P
<i>Gallinago hardwickii</i>	Latham's snipe	P	P	P	P
<i>Haliaeetus leucogaster</i>	white-bellied sea-eagle	-	-	-	P
<i>Hirundapus caudacutus</i>	white-throated needletail	-	P	P	P
<i>Hirundo rustica</i>	barn swallow	-	P	P	P
<i>Merops ornatus</i>	rainbow bee-eater	-	P	-	-

Scientific name	Common name	BONN	JAMBA	ROKAMBA	CAMBA
<i>Monarcha melanopsis</i>	black-faced monarch	P	-	-	-
<i>Myiagra cyanoleuca</i>	satin flycatcher	P	-	-	-
<i>Rostratula australis</i>	Australian painted snipe	-	-	-	P

Bonn – Bonn Convention

CAMBA – China–Australia Migratory Bird Agreement

JAMBA – Japan–Australia Migratory Bird Agreement

ROKAMBA – Republic of Korea–Australia Migratory Bird Agreement