

Forty Mile Scrub National Park



Resource Information

2023

Prepared by: Queensland Parks & Wildlife Service (QPWS), Department of Environment and Science

© State of Queensland, 2023

April 2023

Front cover photo: Forty Mile Scrub National Park: aerial view along Kennedy Highway © Ian Holloway, DES 2019, Queensland Government.

The Queensland Government supports and encourages the dissemination and exchange of its information. The copyright in this publication is licensed under a Creative Commons Attribution 3.0 Australia (CC BY) licence.



Under this licence you are free, without having to seek our permission, to use this publication in accordance with the licence terms.

You must keep intact the copyright notice and attribute the State of Queensland as the source of the publication, and Ewamian Limited and the Wakaman Aboriginal Corporation as the copyright owner in relation to traditional cultural knowledge sections of the publication, as well as acknowledging the Ewamian People and the Wakaman People as the source of that traditional cultural knowledge and site identification information contained in the publication.

For more information on this licence, visit <http://creativecommons.org/licenses/by/3.0/au/deed.en>

Disclaimer

This document has been prepared with all due diligence and care, based on the best available information at the time of publication. The department holds no responsibility for any errors or omissions within this document. Any decisions made by other parties based on this document are solely the responsibility of those parties.

If you need to access this document in a language other than English, please call the Translating and Interpreting Service (TIS National) on 131 450 and ask them to telephone Library Services on +61 7 3170 5470.

This publication can be made available in an alternative format (e.g. large print or audiotape) on request for people with vision impairment; phone +61 7 3170 5470 or email <library@des.qld.gov.au>.

Contents

1. Introduction	2
2. Forty Mile Scrub National Park	3
2.1 First Nations people	5
2.1.1 Wakaman People	5
2.1.2 Ewamian People	5
2.2 Ecosystems and biodiversity	7
2.2.1 Regional ecosystems	7
2.3 Species	7
2.3.1 Native animals	7
2.3.2 Native plants	7
2.4 Geophysical features	8
2.5 Recreational opportunities	8
2.5.1 Day-use areas	8
2.6 Historic cultural heritage	8
2.7 Scientific research	8
2.8 Education	9
2.9 Fire	9
2.10 Pests	9
2.10.1 Pest plants	9
2.10.2 Pest animals	9
Appendices	10
Appendix 1. Legal, policy and management commitments	10
Appendix 2. Regional ecosystems of significance	11
Appendix 3. Species of conservation significance	11
Appendix 4. Species listed in international agreements	11
Appendix 5. Pests	12
References	14

1. Introduction

The Department of Environment and Science recognises, respects and values First Nations peoples and cultures. We recognise First Nations rights and interests in the Country on which we walk, work and live. We are committed to progressing self-determination by working in genuine partnerships with First Nations peoples to incorporate their priorities and perspectives across our decision-making and operations. The *Gurra Gurra Framework 2020–2026* prioritises and accelerates this commitment, guiding the agency to embed Country and people at the centre of all that we do.

The QPWS management planning process aligns with the Values-Based Management Framework (VBMF), an adaptive management cycle that incorporates planning, prioritising, doing, monitoring, evaluating and reporting into all areas of our business (Figure 1). Management plans and statements set the strategic management direction, guiding the next tier of planning and the development of thematic strategies, which in turn inform and prioritise our on-ground operations.

Resource information is a compendium of park information and a supporting document for management plans and management statements. It contains background information about a park’s purpose, values, resources and legal and administrative framework.

Information about the VBMF is available on the Department of Environment and Science (DES) website at www.des.qld.gov.au.

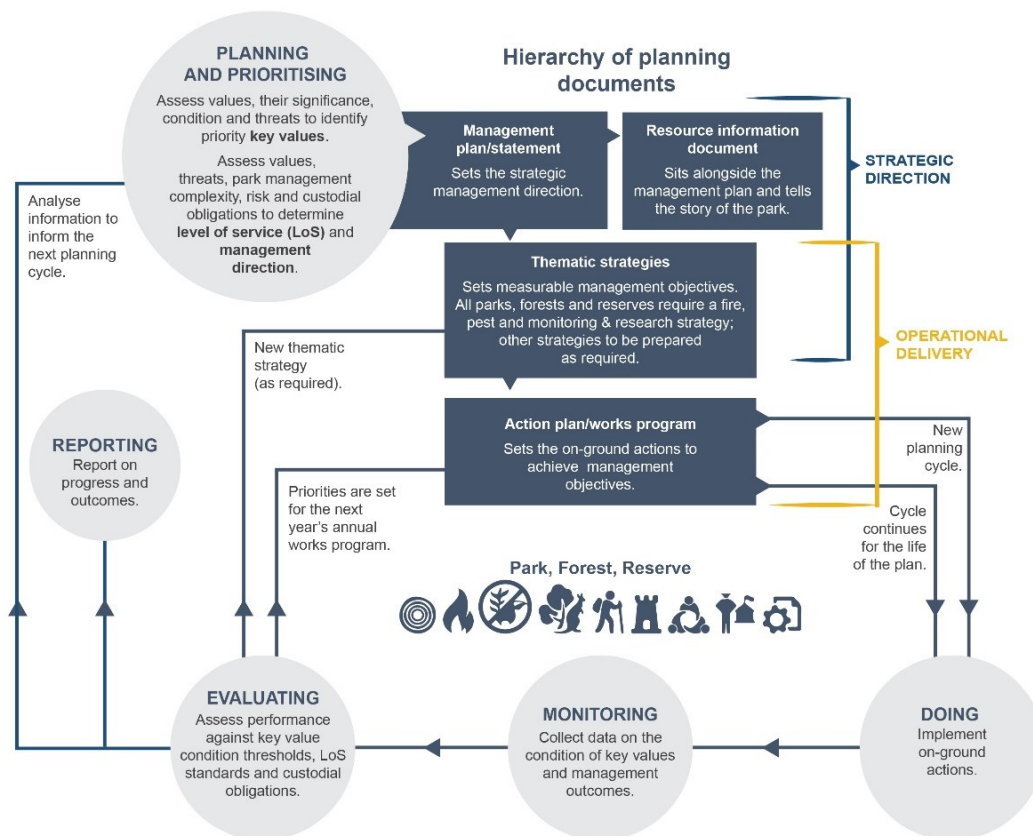


Figure 1. Phases of the VBMF cycle for planning and the hierarchy of planning documents

2. Forty Mile Scrub National Park

Forty Mile Scrub National Park was gazetted in 1970 to protect excellent examples of semi-evergreen vine thicket growing on basalt-derived soils. The park's original area of 4619 hectares increased to 6330 hectares through a number of acquisitions between its initial gazettal date and 1977, incorporating further vine thicket and eucalypt open woodland. Forty Mile Scrub National Park lies within both the Mareeba Shire and Tablelands Regional Council, and is located on either side of the Kennedy Highway, approximately 60 kilometres south of Mount Garnet (Figure 2).

The park is within the Einasleigh Uplands Bioregion. Elevation ranges from 700 metres in the north-western corner of the park to 820 metres at the southern end of the park. Geology is basalt in the south of the park and mainly colluvial in the north, with smaller areas of granite intrusion throughout. Vine thicket covers most of the basalt areas in the south of the park, with smaller areas on colluvial soils in the north. The remainder of the park is open forest or woodland.

Bioregion	Einasleigh Uplands		
Area	6330 ha		
Local Government Area	Mareeba Shire Tablelands Regional	State electorate	Dalrymple
Management obligations	Convention on the Conservation of Migratory Species of Wild Animals (CMS) Japan–Australia Migratory Bird Agreement (JAMBA) China–Australia Migratory Bird Agreement (CAMBA) Republic of Korea–Australia Migratory Bird Agreement (ROKAMBA) <i>Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)</i> <i>Nature Conservation Act (Qld)</i> <i>Biosecurity Act 2014</i> <i>Stock Movement Regulation 2005</i> <i>Aboriginal Cultural Heritage Act 2003 (QLD)</i> <i>Land Act 1994</i> The Burra Charter 1999		

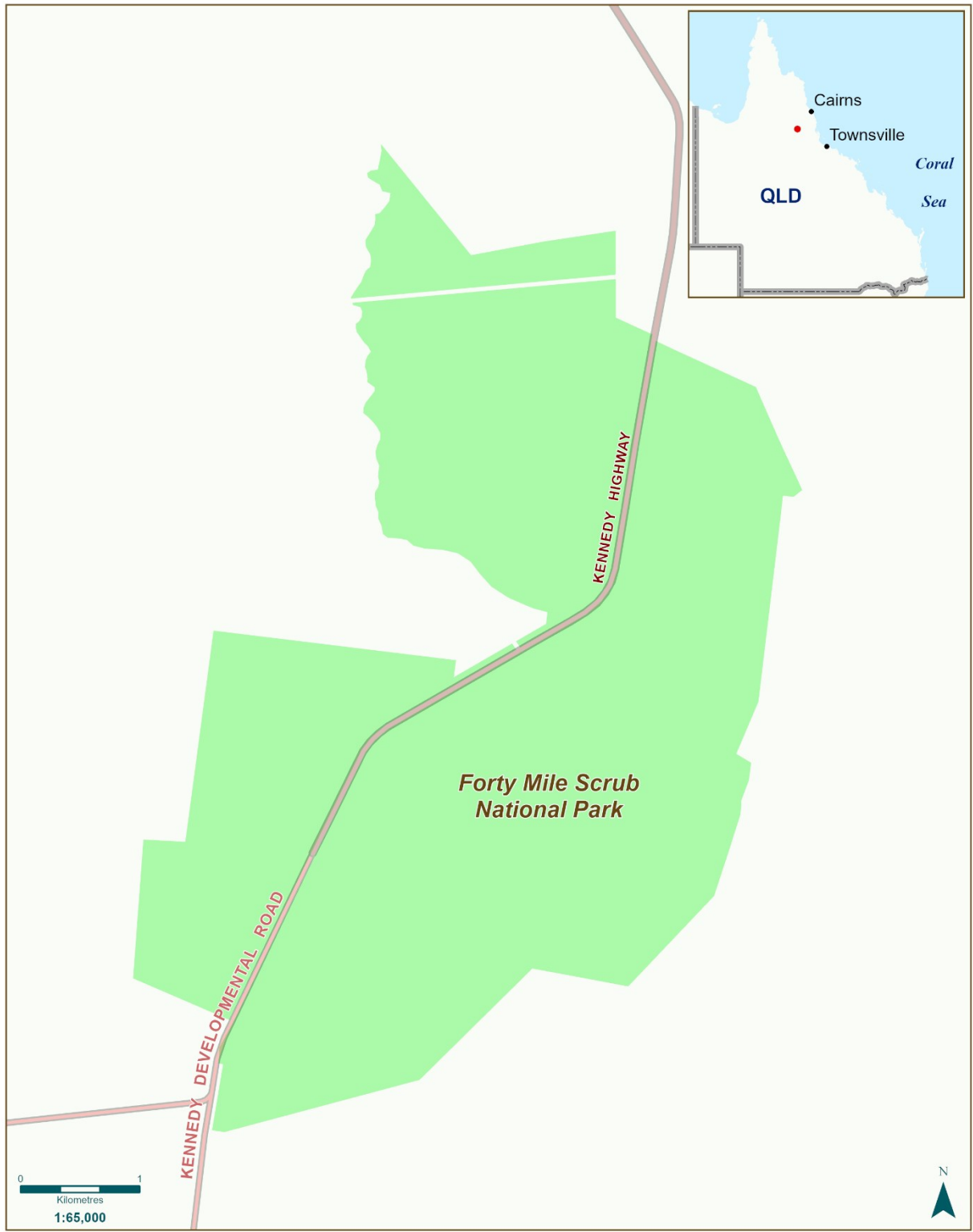


Figure 2. Forty Mile Scrub National Park location map

2.1 First Nations peoples

Forty Mile Scrub National Park lies within the traditional homelands of two First Nations groups. Both the Wakaman People and Ewamian (pronounced *You-a-min*) People share strong ties to the Forty Mile Scrub area. Wakaman People and Ewamian People have looked after their traditional homelands for millennia and continue to do so today. Forty Mile Scrub National Park is a significant part of Wakaman and Ewamian cultural heritage. Indigenous culture remains rich throughout both communities, and includes the entire landscape (i.e. land and waterways, plants and animals), extending to the intangibles (e.g. spiritual connection).

2.1.1 Wakaman People

The southern boundary of the Wakaman People's registered native title claim (QUD178/2018) lies within Forty Mile Scrub National Park. For the Wakaman People, the landscape and the spiritual are connected and are essential to their identity (Map 1).

Forty Mile Scrub National Park is part of the traditional lands of the Wakaman People, and is an important site for the continued preservation of cultural values. The Wakaman People have shared how important it is for them to have access to their traditional lands to pass on cultural knowledge, stories, skills and practices. Wakaman People want to be on Country and involved in the day-to-day management of the park, ensuring the conservation of its natural values and the preservation of its cultural values.

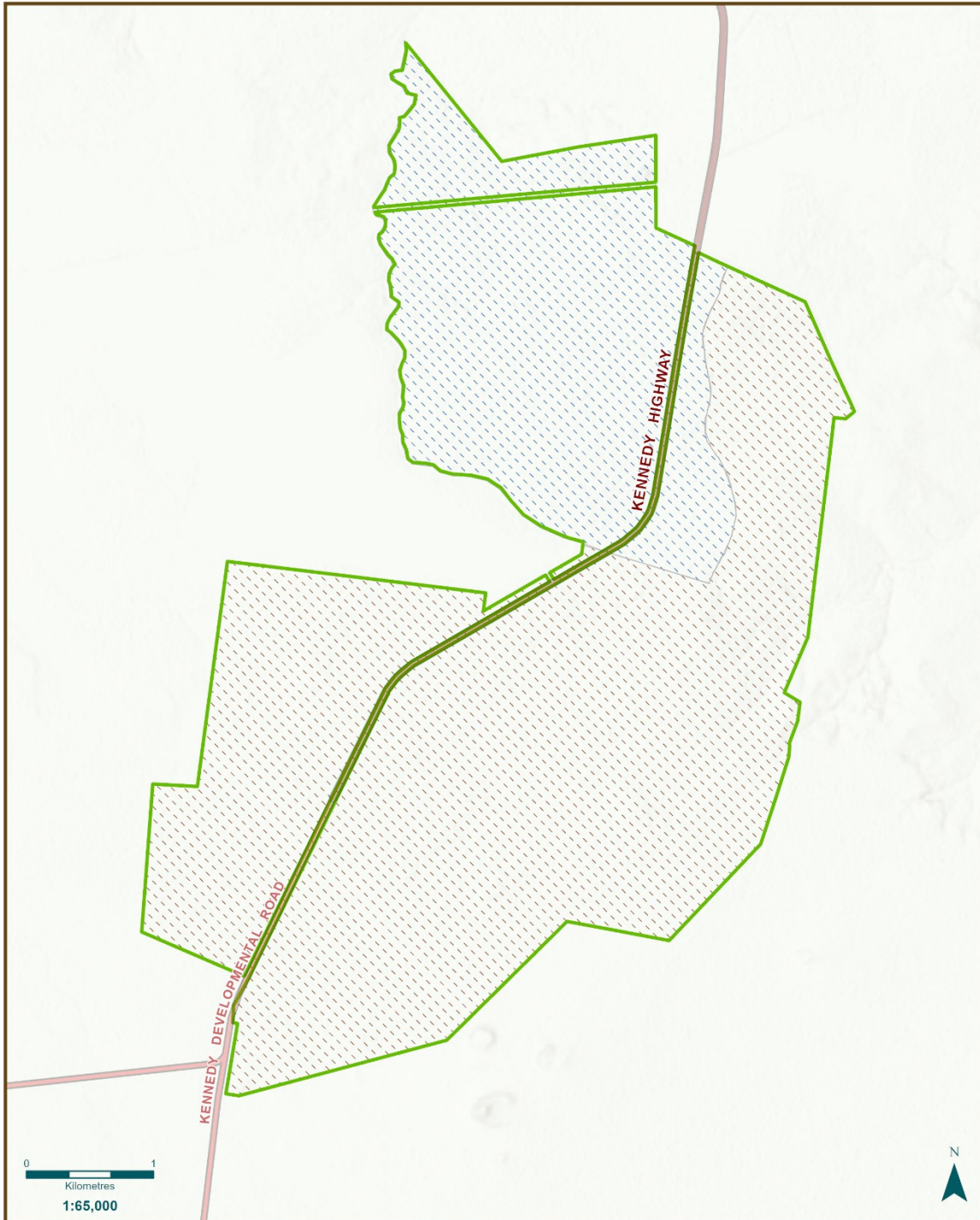
The Wakaman People welcome the opportunity to foster and strengthen partnerships with neighbours the Ewamian People and QPWS in future co-stewardship opportunities.

2.1.2 Ewamian People

The Ewamian People have a non-exclusive native title determination (QCD2013/007) over the majority of Undara Volcanic National Park, which is located approximately 40 kilometres south of Forty Mile Scrub National Park. The Ewamian People have communicated their aspirations to expand their native title determination to incorporate the southern portion of Forty Mile Scrub National Park in the near future.

The ancestors of present-day Ewamian People were born, lived and hunted in this area before the arrival of Europeans. The Ewamian People, and their native title interests, are represented by the Ewamian People Aboriginal Corporation (EPAC), a registered native title body corporation established in 2013 and registered under the *Corporations (Aboriginal and Torres Strait Islander) Act 2006*.

EPAC is supported by Ewamian Limited, the administrative entity of the Ewamian corporate group, which provides a range of services to the Ewamian People, with the vision of enhancing Ewamian People's culture and connection to Country through positive change and promoting partnerships with key stakeholders.



Forty Mile Scrub National Park First Nations Map

Key Values

- Connection to country, Ewamian Aboriginal people
- Wakaman People #5 Registered Native Title Claim
- Highway
- Main Road
- Protected Areas of Interest
- National Park

MAP PRODUCTION

06 April 2022
 Queensland Parks and Wildlife Service
 Department of Environment and Science.

ACCURACY STATEMENT

Due to varying sources of data, spatial locations may not coincide when overlaid.

Service Layer Credits: Elevation/World_Hillshade: Esri, Geoscience Australia, NASA, NGA, USGS

© The State of Queensland 2022

VERSION 202204

Forty Mile Scrub NP_template_20220406 (panhalkara)



Map 1. Forty Mile Scrub National Park First Nations map

2.2 Ecosystems and biodiversity

2.2.1 Regional ecosystems

Forty Mile Scrub National Park protects semi-evergreen vine thickets near the western limit of this vegetation type. The park's species-rich vine thicket communities are its key natural value and the primary purpose for its gazettal.

There are five regional ecosystems of conservation significance, including two vine thicket regional ecosystems, that cover approximately one-third of the park. An area of open forest at the head of the Lynd River contains an ephemeral swamp understorey on cracking clays. This vegetation type is not included in protected areas elsewhere (K. McDonald, pers. comm., 2009). Refer to Appendix 2 for significant regional ecosystems.



Figure 3. Semi-evergreen vine thicket on Forty Mile Scrub National Park © DES 2019

2.3 Species

2.3.1 Native animals

Forty Mile Scrub National Park is an important macropod habitat due to its location and range of regional ecosystems, but fauna records are limited. However, species such as the black-striped wallaby *Notamacropus dorsalis*, red-legged pademelon *Thylogale stigmatica*, and the swamp wallaby *Wallabia bicolor* have become increasingly harder to find in recent years (D. Storch, pers. comm., 2022).

The park has recorded 131 native vertebrate species from limited surveys. Recorded species include 87 birds, 13 mammals, 21 reptiles and 10 frogs. A number of animals are dependent on vine thickets, or seek food or shelter in the vine thickets at certain times of the day or year, for example, Lewin's honeyeater *Meliphaga lewinii*, the scarlet sided pobblebonk *Limnodynastes terraereginae* and the orchard swallowtail butterfly *Papilio aegaeus*.

The park's vine thickets represent the dry western limit of the rainforest dwelling red-legged pademelon *Thylogale stigmatica* and the northern limit of the black-striped wallaby *Notamacropus dorsalis*. Koalas *Phascolarctos cinereus* pass through the park in low numbers. Endemic species of spiders and land snails have been recorded from limited invertebrate surveys in the vine thickets of the park (The State of Queensland, Queensland Parks and Wildlife Service, 2000).

2.3.2 Native plants

There have been approximately 240 plant species recorded in the park, including three of conservation significance (Appendix 3). These are the vulnerable grass *Lepturus minutus*, the near threatened rainforest habeneria *Habenaria hymenophylla* and the vulnerable *Ipomoea saint ronensis*.

2.4 Geophysical features

The McBride lava province covers much of Undara Volcanic National Park, the southern part of Forty Mile Scrub National Park and the entirety of Kinrara National Park. Nearly continuous volcanic activity in this geological province over the last 2.7 million years, and particularly the last 190,000 years, has formed much of the geology of these parks.

The scenic values of Forty Mile Scrub National Park derive mainly from its vegetation, which is largely a result of its basalt geology. The park's basalt geology contributes to its vine thicket vegetation by providing nutrients, while its rockiness reduces fires. The park is undulating to flat throughout, and its vine thickets contrast strongly with surrounding eucalypt woodland. The southern part of the park overlies olivine basalt from the McBride lava province, while northern parts of the park are largely Tertiary (1.8 to 65 million years old) to Quaternary alluvial and colluvial deposits.

The Great Dividing Range passes imperceptibly through Forty Mile Scrub National Park. The eastern part of the park contains the headwaters of the Barwon Creek draining to the Herbert River and east coast. The Lynd River rises in the western part of the park, downstream becoming a major tributary of the Mitchell River draining to the Gulf of Carpentaria (The State of Queensland, Queensland Parks and Wildlife Service, 2000).

2.5 Recreational opportunities

There are no camping facilities at Forty Mile Scrub National Park and camping is not permitted.

2.5.1 Day use areas

Forty Mile Scrub National Park has a day use area adjacent to the Kennedy Developmental Road (Highway 1), with toilets and picnic shelters. The day use area is a popular rest stop for travellers on the highway. Large interpretive signs at the edge of the highway are part of the 'Savannah Way' tourism initiative, providing information on the park and regional destinations along the Savannah Way from Cairns to Broome in Western Australia. A short walking track leads from the day use area and includes information about the park's vine thickets, offering visitors a nature-based educational opportunity (The State of Queensland, Queensland Parks and Wildlife Service, 2000).

2.6 Historic cultural heritage

The explorer Ludwig Leichhardt passed through Forty Mile Scrub National Park in 1845. The surrounding area was settled for pastoral purposes from the 1860s, and the present-day park was included in the Saint Ronans, Minnamoolka and Mount Laing North holdings. The Forty Mile Scrub vine thicket was not extensively grazed as it held no surface water and supported less grass than surrounding areas. Stands of cypress pine in the park have been harvested in the past because their timber is renowned for its resilience to insect attack. There are no known shared-history cultural heritage items on the park (The State of Queensland, Queensland Parks and Wildlife Service, 2000).

2.7 Scientific research

Some research has been undertaken into vine thicket plant species and ecology on Forty Mile Scrub National Park. Research could assist management by investigating the control treatments of pest plants (particularly lantana), pest animals (particularly pigs) and fire in vine thickets, and trialling methods of rehabilitating degraded vine thickets. Further flora and fauna survey opportunities exist, especially in vine thickets and in areas of sclerophyll woodland on seasonally waterlogged clay soils that support understorey plants not found elsewhere on the park.

2.8 Education

Forty Mile Scrub National Park offers visitors an opportunity to learn about vine thicket ecology and threats, as its facilities and location adjacent to the Kennedy Developmental Road make it a convenient rest stop for travellers.

Signs in the Forty Mile Scrub information shelter place this park in regional context and introduce off-park regional points of interest. Interpretative signs at the Forty Mile Scrub day use area and along the walking track educate visitors about vine thicket species, ecology and threats.

2.9 Fire

Unauthorised fires lit along the Kennedy Developmental Road have entered the park and become bushfires that have caused substantial damage to the fire-vulnerable vine (The State of Queensland, Queensland Parks and Wildlife Service, 2000).

The park has been subject to severely damaging late dry season bushfire heavily impacting on the southern vine thickets; the last was in 2019, with stunted regeneration evident. In most years, this has been managed by an early season burning program to reduce risk to adjoining property. Arson and accidental ignition along the Kennedy Developmental Road remain problematic, as do ecosystem changing weeds such as lantana and grader grass, which can act as wicking fuels, drawing later season wildfire into fire sheltered vine thickets (M. Parsons. Pers. Comms., 2022).

2.10 Pests

2.10.1 Pest plants

Dense populations of lantana cover Forty Mile Scrub National Park. Much of the park's semi-evergreen vine thicket has been invaded by lantana *Lantana camara*, possibly assisted by feral pig activities and bushfire. Lantana control is ongoing and has concentrated on areas that are good representations of their regional ecosystems and do not display any fire damage. Some areas disturbed by lantana invasion and subsequent control are being colonised by other pest plant species. Lantana out-competes native understorey plants and tree seedlings and increases fuel load, carrying bushfires that kill vine thicket canopy trees (Fensham, Fairfax and Cannell, 1994).



Photo 4. Lantana *Lantana camara* in semi-evergreen vine thicket © Anthony Staniland, DES 2019

Small infestations of the rubber vine *Cryptostegia grandiflora* and parthenium weed *Parthenium hysterophorus* have been recorded in the park. The parthenium weed infestations appear to have been eradicated, with monitoring for new infestations ongoing (Appendix F).

2.10.2 Pest animals

Feral pigs seriously threaten the park's semi-evergreen vine thickets, as their digging causes tree death, and the resultant increased light penetration assists lantana germination. Other recorded pest animals are feral cats, wild dogs and European honey bees *Apis mellifera* (Appendix G). Occasional instances of straying stock have occurred on the park. No pest bird or fish species have been recorded (The State of Queensland, Queensland Parks and Wildlife Service, 2000).

Appendices

Appendix 1. Legal, policy and management commitments

Gazettal details

Forty Mile Scrub National Park was gazetted in 1970.

Applicable Acts and statutory powers

- *Nature Conservation Act 1992 (Qld)*
- *Native Title Act 1993 (Cwlth)*
- *Environment Protection Biodiversity Conservation Act 1999 (Cwlth)*
- *Biosecurity Act 2014*
- *Aboriginal Cultural Heritage Act 2003 (Qld)*
- *Stock Route Management Act 2002*
- *Stock Movement Regulation 2005*

Other management commitments

- Convention on the Conservation of Migratory Species of Wild Animals
- CAMBA – China–Australia Migratory Bird Agreement
- JAMBA – Japan–Australia Migratory Bird Agreement
- ROKAMBA – Republic of Korea–Australia Migratory Bird Agreement

Appendix 2. Regional ecosystems of significance

Regional ecosystem	Description	Biodiversity status
9.5.2	Semi-evergreen vine thicket on red kandosols on Tertiary plateaus.	Of concern
9.5.5a	<i>Corymbia clarksoniana</i> , <i>Eucalyptus portuensis</i> , <i>E. crebra</i> and <i>C. citriodora</i> subsp. <i>citriodora</i> in mixed open forests on red kandosols on Tertiary surfaces.	Of concern
9.5.5b	<i>Corymbia clarksoniana</i> , <i>Eucalyptus portuensis</i> , <i>E. crebra</i> and <i>C. citriodora</i> subsp. <i>citriodora</i> in mixed open forests on red kandosols on Tertiary surfaces.	Of concern
9.5.5g	<i>Corymbia clarksoniana</i> , <i>Eucalyptus portuensis</i> , <i>E. crebra</i> and <i>C. citriodora</i> subsp. <i>citriodora</i> in mixed open forests on red kandosols on Tertiary surfaces.	Of concern
9.8.3	Semi-evergreen vine thicket on Quaternary basalt soils.	Of concern

Appendix 3. Species of conservation significance

Scientific name	Common name	NC Act status	EPBC Act status	Back on track
Plants				
<i>Ipomoea saint ronanensis</i>	None	Vulnerable	None	
<i>Habenaria hymenophylla</i>	rainforest habenaria	Near threatened	None	
<i>Lepturus minutus</i>	None	Vulnerable	None	
Animals				
<i>Apus pacificus</i>	fork-tailed swift	Special least concern	None	
<i>Hirundapus caudacutus</i>	white-throated needletail	Vulnerable	Vulnerable	
<i>Monarcha melanopsis</i>	black-faced monarch	Special least concern	None	
<i>Rhipidura rufifrons</i>	rufous fantail	Special least concern	None	
<i>Phascolarctos cinereus</i>	koala	Vulnerable	Endangered	
<i>Acanthophis antarcticus</i>	common death adder	Vulnerable	None	

Appendix 4. Species listed in international agreements

Scientific name	Common name	CMS	JAMBA	ROKAMBA	CAMBA
<i>Haliaeetus leucogaster</i>	White-bellied sea-eagle				X

Notes:

This list includes local and migratory birds that regularly use the park for feeding, nesting and/or breeding. Species that may visit intermittently have not been included in this table.

CMS – Convention on the Conservation of Migratory Species of Wild Animals

CAMBA – China–Australia Migratory Bird Agreement

JAMBA – Japan–Australia Migratory Bird Agreement

ROKAMBA – Republic of Korea–Australia Migratory Bird Agreement

Appendix 5. Pests

Scientific name	Common name	Biosecurity Act 2014 status	Historic notes
Plants			
<i>Cenchrus ciliaris</i>	Buffel grass	-	Found along fire breaks and into open areas in the semi-evergreen vine thickets. Impacts: <ul style="list-style-type: none"> Can increase intensity of fires due to a higher fuel load than native grasses.
<i>Themeda quadrivalvis</i>	Grader grass	-	Present at day use area and in open woodlands where it is well integrated into the grassy understory. Densities can change between years as this is an annual grass. Impacts: <ul style="list-style-type: none"> Displaces native species. Can increase intensity of fires due to a higher fuel load than native grasses.
<i>Andropogon gayanus</i>	Gamba grass	Category 3 restricted invasive plant	Not present on Forty Mile Scrub National Park but present within the local area.
<i>Lantana camara</i>	Lantana	Category 3 restricted invasive plant	Dense populations of lantana cover the park, particularly in the semi-evergreen vine thickets on red basaltic soils. Impacts: <ul style="list-style-type: none"> Outcompetes native species. Can increase intensity of fires. High intensity wildfires have burnt into the vine thickets in the recent past and significantly impacted them. Some of these burnt areas have then been quickly colonised by lantana.
<i>Chromolaena odorata</i>	Siam weed	Category 3 restricted invasive plant	Found in isolated locations along the Kennedy Highway and on the southern end of 'Super Break'.
<i>Macrotyloma axillare</i>	Horse gram	-	Horse gram is present on Forty Mile Scrub National Park and has become established in areas severely impacted by high intensity wildfires.
<i>Solanum seaforthianum</i>	Brazilian nightshade	-	Widespread throughout the semi-evergreen vine thickets and is actively spread by birds. It is also considered a day use area weed.
<i>Cryptostegia grandiflora</i>	Rubber vine	Category 3 restricted invasive plant	Areas of rubber vine have colonised the semi-evergreen vine thicket margins, particularly in damper areas. Impacts: <ul style="list-style-type: none"> Compete with and displace native species. Is also present around the day use area.
<i>Hyparrhenia rufa</i>	Thatch grass	-	Present at the day use area.
<i>Bidens pilosa</i>	Cobblers pegs	-	Present on the park, particularly around the day use area.
<i>Mimosa pudica</i>	Sensitive weed	-	Present on the park, particularly around the day use area.
<i>Megathyrsus maximus</i>	Guinea grass	-	Guinea grass is starting to be noticed in small numbers, particularly in areas of high usage such as the day use area.
<i>Parthenium hysterophorus</i>	Parthenium	Category 3 restricted invasive plant	Not known to be present on park.
<i>Alternanthera pungens</i>	Khaki weed	-	Khaki weed has been noted in the day use area historically and has the potential to reappear into the future.
<i>Gomphrena celosioides</i>	Gomphrena weed	-	Gomphrena weed has been noted in the day use area historically and has the potential to reappear into the future.

Animals

Scientific name	Common name	Biosecurity Act 2014 status	Historic notes
<i>Sus scrofa</i>	Feral pig	Category 3, 4 and 6 restricted invasive animal	Pig diggings are occurring within the vine thicket community, causing damage to the key canopy species, exposing soils and opening the forest for lantana invasion. Other pig disturbance includes rooting, rubbing and sighting of fresh droppings. For the purpose of this document, 'Fresh pig disturbance' is defined as pig activity such as rooting, foraging or wallowing that is recurring, increasing in area or severity or damaging to native vegetation.
<i>Felis catus</i>	Cat	Category 3, 4 and 6 restricted invasive animal	Believed to be on park in small numbers.
<i>Bos spp.</i>	Cattle	-	Generally not present as fences are well maintained, so cattle rarely stray onto park.
<i>Rattus rattus</i>	Black rat	Invasive animal	
<i>Mus musculus</i>	House mouse	-	
<i>Equus caballus</i>	Horse	-	

References

The State of Queensland, Queensland Parks and Wildlife Service. (2000, February). 'Draft Undara Volcanic and Forty Mile Scrub National Parks Management Plan'. Queensland, Australia.

Fensham, R. J., Fairfax, R. J. and Cannell, R. J. (1994) 'The invasion of *Lantana camara* L. in Forty Mile Scrub National Park, north Queensland', *Australian Ecology*, vol. 19, pp. 297-305.