

Locality map



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Summary

This management plan provides the framework and guidelines on how Marijala National Park will be managed. It sets out the considerations, outcomes and strategies that are proposed to form the basis on which day-to-day management decisions are made.

This plan was prepared in May 1998 and, in accordance with s125 of the *Nature Conservation Act 1992*, will be reviewed not later than 10 years after its approval. For further information on this plan or the planning process, please contact the Department of Environment's Southwestern Regional Centre in Toowoomba on (07) 4639 4599 during business hours.

This management plan was prepared by Department of Environment staff. Thanks are due to those groups and individuals who made submissions in response to the draft plan.

Management plan



Mulga Lands Biogeographic Region

Marijala National Park

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1. Management directions and purposes

1.1 Management directions

Marijala National Park is dedicated under the *Nature Conservation Act 1992* and must be managed in accordance with section 17 of the Act:

- to provide for the permanent preservation of the area's natural condition, to the greatest possible extent;
- to present the area's cultural and natural resources and their values; and
- to ensure that the only use of the area is nature-based and ecologically sustainable.

Marijala National Park was dedicated in 1992 and conserves 27 300 hectares of scarps, gorges and dissected residuals. The park has never been cleared for agricultural purposes and supports communities of hard and soft mulga with populations of mountain yapunyah *Eucalyptus thozetiana* and Dawson gum *E. cambageana*.

The park has no permanent ranger presence and is patrolled from Charleville. No visitor facilities are provided so visitors need to be self-reliant. The park environment favours low-impact, nature-based recreational activities such as nature observation, photography, birdwatching and bushwalking.

1.2 Purposes

The major purposes of management will be to ensure that:

- natural plant and animal communities are conserved;
- rare and threatened species are identified and conserved through specific management strategies if appropriate;
- areas of cultural and historic significance are conserved;
- a range of recreational opportunities consistent with conservation objectives is provided;
- continued research into ecological processes associated with the park is promoted; and
- neighbours, local government, Aboriginal groups and other interested parties are aware of park management issues and are provided with opportunities to be involved in the process of managing the park, where appropriate.

2. Basis for management

2.1 Bioregional context

Marijala National Park was, for a number of years, the only conservation area within the 20 million hectares of the Mulga Lands biogeographic region. In order to ensure the conservation of biodiversity and the biological health of the communities within the mulga lands, a system of reserves containing representatives of most land systems and vegetation types, has been gazetted.

The park is located approximately 120km north-west of Charleville and is situated within the Ambathala Range area. The Charleville-Adavale road crosses Marijala National Park, allowing access for conventional drive vehicles. Access within the park is via boundary roads and old seismic lines (4WD only), or by walking. The park has no camping areas, but bush camping is permitted.

2.2 Values of Marijala National Park

Geology and landform

Marijala lies within the Great Artesian Basin in the upper catchments of the Bulloo, Paroo and Warrego river systems (Addicot and Dollery 1995). Drainage lines within the park act merely as watersheds and do not provide permanent sources of water.

The eastern portion of Marijala is dominated by Tertiary deep red earths which form undulating plains. Texture contrast soils occur in the drainage lines, and loamy red earths are found on the rises. The western section of the park comprises dissected residuals made up of Cretaceous lithosols.

Active sheet erosion, characterised by skeletal and shallow soils, is occurring at the boundary between the residuals and the soft mulga plains (Addicot and Dollery 1995).

Plants and animals

Seven major landforms occur within the park; three of these support mulga *Acacia aneura* communities as the dominant vegetation association. Approximately one-third of the park consists of soft mulga country which is representative of large tracts of the Mulga Lands biogeographic region.

Several plant species with particular conservation importance are reserved within the park. These include:

- *Rhaphidospora bonneyana*, a vulnerable forb which is found below residual landforms at Marijala, and is known from only a few localities;
- *Hakea* sp. nov. (Ambathala Range, C Sandercoe 507) which has only been recorded in the Adavale-Cheepie area, and is considered vulnerable;
- *Euphorbia sarcostemmoides*, *Thryptomene hexandra* and *Ptilotus remotiflorus* considered to be rare;
- *Womal Acacia maranoensis*, which has a restricted range;
- populations of bendee *Acacia catenulata* and bowyakka *A. microserma*, which are not well represented in other national park estate; and,
- *Maytenus cunninghamii*, brigalow *Acacia harpophylla*, poplar box *Eucalyptus populnea* and red ash *Alphitonia excelsa* which are close to their western limits of their range at Marijala and therefore are of biogeographic importance.

To date, 146 bird species, 26 reptile species, 10 amphibian species, 27 mammal species and various invertebrates have been recorded on Marijala National Park. Some of the more notable species include:

- Square-tailed kite *Lophoictinia isura* and redthroat *Pyrholaemus brunneus* which are considered rare;
- bar-shouldered dove *Geopelia humeralis*, sulphur-crested cockatoo *Cacatua galerita*, Bourke's parrot *Neophema bourkii*, speckled warbler *Chthonicola sagittata* and pied currawong *Strepera graculina* which are close to the limits of their accepted range;
- yellow-footed rock-wallaby *Petrogale xanthopus* ssp. celeris which is geographically restricted; and
- koala *Phascolarctos cinereus* which is at the western limits of its range.

Cultural heritage

Little is known about the Aboriginal cultural heritage values of Marijala National Park, other than that it is in Wadjalan country (Tindale 1974). Areas of Aboriginal occupation are known within the park.

The park has few examples of known historical interest.

Scenic and aesthetic

Marijala offers visitors the opportunity to experience the harsh beauty typical of the hard mulga lands and dissected residual landscapes of the region. Visitors can enjoy views to the horizon from the tops of the escarpments of the Ambathala Range without leaving the Adavale Road.

Scientific and educational

Marijala was originally established as a scientific reserve in 1979 to provide a reference site for research into the condition of native pasture under natural environmental variations and in the absence of introduced stock, and the recovery of pasture after the removal of stock.

A number of rare, restricted or biogeographically important species recorded within the park are also of scientific importance.

Recreation and tourism

Visitors to Marijala National Park have the opportunity to enjoy low-key, nature-based recreational pursuits in the absence of any formal recreational infrastructure. The park is remote from any major centre and contact with other visitors and signs of surrounding pastoral industry is minimal.

3. Management strategies

Current situation	Desired outcomes	Proposed policies, guidelines and actions
<p>Native plants</p> <p>Mariala National Park has never been cleared for agricultural purposes. Plant communities within the park are generally in good condition.</p> <p>The major disturbance to vegetation communities has been the result of the seismic line exploration carried out in 1982 and 1985-86.</p> <p>A natural resource document has been produced for Mariala and aids management decisions.</p> <p>Future threats to vegetation are total grazing pressure, soil erosion, increased dominance of woody weeds such as <i>Eremophila</i> spp., and a lack of seeds in the seed bank.</p>	<p>The biological health and diversity of natural plant species and communities are conserved.</p> <p>Degraded plant communities are rehabilitated.</p>	<p>Research into rare and threatened species will be encouraged to learn more about the ecological requirements, sensitivities and preferences of the species.</p> <p>Vegetation will be regularly monitored for signs of disturbance through visitor use, the impacts of feral animals, the encroachment of introduced species and broad vegetation dynamics.</p> <p>The acquisition of up-to-date background resource information (e.g. aerial photography) will be an integral part of monitoring programs.</p>
<p>Native animals</p> <p>Comprehensive species lists have been compiled.</p> <p>Little information is available on factors such as habitat requirements, breeding, resource utilisation and levels of abundance.</p> <p>Captive-bred yellow-footed rock-wallabies are periodically released at Mariala.</p> <p>Surrounding landholders have expressed concern that dingoes migrate across surrounding properties from the park and threaten livestock.</p>	<p>Native animals and their associated habitats are protected.</p> <p>The long-term survival of threatened species and species of conservation significance is enhanced.</p> <p>Park management has a responsibility to monitor dingo activity and plan appropriate management.</p>	<p>Management actions will be developed for threatened species and species of conservation significance to enhance their continued presence in the park.</p> <p>Baiting for dingoes will only occur as part of a strategic and co-ordinated program.</p> <p>Baiting will be restricted to areas along the perimeter of the park, and will be co-ordinated and supervised by suitable personnel from DoE and other agencies where appropriate.</p> <p>Detailed monitoring of past and future yellow-footed rock-wallaby releases at Mariala will be undertaken.</p> <p>Native animal sightings, observations and records will be gradually collected.</p>
<p>Introduced plants and animals</p> <p>The most significant introduced plant species recorded within Mariala is spiny pest-pear <i>Opuntia stricta</i>, which occurs in a restricted area on the southern boundary of the park.</p> <p>A weed and vegetation pest survey and report has been prepared for Mariala.</p> <p>Feral goats and rabbits have been recorded in significant numbers on the park. Goats are a major threat to the yellow-footed rock-wallabies.</p>	<p>The number and distribution of introduced plants and animals on the park are controlled.</p> <p>Areas degraded by feral animal activity are rehabilitated.</p>	<p>The extent and density of weed species will be monitored.</p> <p>Appropriate control action will be instigated. Species which require close monitoring will be detailed in the weed and vegetation pest survey.</p> <p>Being in the upper catchments of three river systems, active management of weed infestations will be treated as a priority.</p> <p>Contractors, self-mustering and shooting are management options for the control of feral goats on Mariala.</p>
<p>Fire management</p> <p>The most recently recorded fire within Mariala occurred in 1952.</p> <p>Total grazing pressure combined with a dense canopy cover and extremely dry weather conditions, has meant that fuel loads on the park have had little chance to build.</p> <p>Tracks follow the boundary fence and act as a firebreak and provide access. They range in width from 3-6m.</p> <p>The Department relies to a large extent on neighbours to detect and report fire outbreaks.</p>	<p>The integrity and biological diversity of native plant and animal communities are maintained through responsible fire management.</p> <p>Visitors and park infrastructure are protected from fire.</p>	<p>Seismic lines will be assessed to determine which will be required for use as firebreaks.</p> <p>Those not required for management purposes will be rehabilitated.</p> <p>Staff responsible for the park will receive appropriate fire training.</p> <p>The need for a fire management plan will be reviewed annually. Liaison with, and involvement of, neighbours will be sought in the development of the plan.</p>
<p>Landscape, soil and catchment protection</p> <p>Old seismic lines pose the greatest threats to soil erosion. A disused telegraph line on the north of the park also needs rehabilitation work to prevent erosion.</p>	<p>Erosion has also occurred around King Tank No. 3 Bore, and along the track from Range Tank to No. 3 Bore.</p> <p>Soil erosion and compaction within the park is minimal. Park operations have a minimal impact on the quality of ground and surface water in the park and in the catchment area.</p>	<p>Where soil erosion is currently a problem, either natural (i.e. vegetative stabilisation of soil) or artificial (i.e. diversion of runoff) methods will be implemented. Rehabilitation of the seismic lines within the park will continue.</p> <p>The track from Range Tank to No. 3 Bore will be closed and earthworks done to prevent further erosion. Any new tracks or track realignment will be constructed so as to minimise erosion.</p> <p>All watering points in the park will remain open for use as a feral animal trap</p>

<p>Cultural heritage</p> <p>No Aboriginal groups with interests in Mariala have been identified. No park surveys have been conducted to locate specific sites of cultural significance.</p> <p>Old bore sites, windmills and pieces of machinery are located on the park. A draft pastoral history of the park has been prepared.</p>	<p>Sites and associations of Aboriginal cultural heritage have been identified and protected. Aboriginal people with traditional affiliations in the area are involved in park management. Items of European heritage value are conserved.</p>	<p>Existing Aboriginal interests in the park will be identified. Opportunities will be provided for those groups and individuals to participate in the planning and management of the park.</p> <p>Privacy of spiritual associations with sites/places will be respected. Items of machinery that are considered to be part of the park's cultural heritage will be retained.</p> <p>The windmill at No. 3 Bore will be maintained in working order to provide water for management purposes.</p>
<p>Recreation and tourism</p> <p>Mariala offers a remote atmosphere, due to the absence of camping infrastructure and its location away from major thoroughfares.</p> <p>The park has no designated camping areas, and no figures are available on the number of campers or day visitors using Mariala.</p> <p>Firebreaks and old seismic lines provide access within the park. Four wheel drive vehicles are required.</p>	<p>Opportunities for nature-based recreation which is ecologically sustainable are provided.</p> <p>In keeping with the remote nature of the park, limited visitor facilities are provided.</p>	<p>Limited visitor facilities will be provided on Mariala, in line with the expected low number of visitors to the park and also in keeping with the remote character of the area. Bush camping will be permitted within the park at sites selected by park management staff.</p> <p>Seismic lines and existing tracks will be assessed to determine those required as access roads. Those not required for management purposes will be rehabilitated.</p> <p>Visitors will be required to be self-reliant, and will be encouraged to use fuel stoves to reduce the impact of wood collection on fauna habitat.</p> <p>Consideration may be given to the development of a day-use area on the Charleville-Adavale road to cater for increased day users and to restrict day-use impacts in the park. Information will be provided to visitors on safety precautions to be taken in semi-arid parks.</p>
<p>Education and interpretation</p> <p>No interpretive material on Mariala has been prepared. Standard park name signs are located at the eastern and western sides of the park adjoining the Charleville-Adavale road.</p>	<p>The park's values and management needs are presented, and visitor behaviour is consistent with responsible and sustainable use of the park.</p> <p>Community support and involvement in park management is secured.</p>	<p>A visitor information sheet will be produced.</p> <p>Visitors will, where possible, be provided with information on trip preparation and on-park requirements in order to educate them about self-sufficiency and ensuring their own safety.</p>
<p>Resource use</p> <p>Vegetation monitoring is carried out annually using Q-Graze methodology. A rabbit- and marsupial-proof grazing enclosure was erected in 1981. A high-voltage power line crosses the park to the south of the Charleville-Adavale road.</p> <p>Due to the poor condition of boundary fencing, stock occasionally stray onto the park.</p>	<p>Continued opportunities for research and monitoring activities within the park are provided in order to improve and evaluate management decisions.</p> <p>Environmentally friendly management practices are used in the management of public utilities.</p> <p>Boundary fences are maintained in a stock-proof condition.</p>	<p>Research will be encouraged on the park. A major focus for monitoring work will encompass the yellow-footed rock-wallaby release program and the control program for feral goats.</p> <p>Monitoring of the original enclosure will be recommenced and the site will be maintained as a reference point displaying the effects of kangaroo grazing. A new enclosure will be constructed.</p> <p>The use of Landcare principles in the management of the power line easement will be encouraged. Existing access agreements will continue.</p> <p>Department staff will liaise with neighbours to determine appropriate fencing arrangements, and work will be undertaken as resources permits.</p>
<p>Plan implementation and monitoring</p> <p>Work programs tend to be reactive in nature, and are undertaken only as resources permit.</p>	<p>Staff and resources are adequate for an appropriate standard of park management.</p>	<p>Mariala will be managed for the next 5-7 years in accordance with the guidelines contained in this management plan.</p>

Bibliography

Addicott, E. and Dolly, C. (1995). Mariala National Park - Natural Resource Document. Internal Unpublished Report. Department of Environment, Queensland

Tindale, N. (1974). *Aboriginal Tribes of Australia*. ANU Press, Canberra.