



Annual Reserve Report

Flat Rock Reserve 2015-16



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INTRODUCTION

The Tasmanian Land Conservancy (TLC) protects important natural areas as permanent reserves and aims to demonstrate excellence in reserve management for biodiversity conservation. To achieve this aim, the TLC has adopted an adaptive management framework – the Open Standards for the Practice of Conservation. The framework comprises 6 key steps – planning, implementing, monitoring, reporting, review/adaptation and communication.

Flat Rock Reserve was acquired by the TLC in 2006 and protects 455 hectares of eucalypt woodland and rock-plate grassland in the Meehan Range, northeast of Hobart. The Reserve adjoins Chauncy Vale Wildlife Sanctuary which is one of Tasmania's oldest reserves. The management of the Reserve is guided by the Chauncy Vale Sanctuary and Flat Rock Reserve Management Plan. The plan is implemented by TLC staff through an Annual Work Plan and Monitoring Plan. Details of ecological monitoring methods can be found in TLC's Ecological Monitoring Procedures Manual.

This report describes progress made towards delivery of the management plan in 2015-16, and is divided into three sections:

1. Reserve Scorecard – a table summarising the results of ecological monitoring to date;
2. Management Summary – providing details of the implementation of key management strategies and making recommendations for plan improvement;
3. Ecological Monitoring Summary – providing details of the status of conservation targets and trends of key ecological indicators


The recommendations made in this report are used to adapt and improve management of the Reserve, update the management plan, and revise work and monitoring plans for the coming year. Key findings of this report are communicated to TLC Board, supporters and other stakeholders.


FLAT ROCK RESERVE SCORECARD

Monitoring			
Target	Indicator	Status 2014-15	Trend
Dry eucalypt forest and woodland	Floristic diversity	8.6 species/site	Baseline data collected in 2014 Repeat data collection scheduled for 2019
	Structural complexity	5 strata/site	
	Vertebrate fauna diversity	5.25 species per site 14 species total	
	Indicator	Status 2015-16	Trend
Community connection to landscape	# volunteer days on the Reserve	30	Flat
	# visitors to the Reserve	100+	Unknown
	# of research and education projects	1	Flat
Management Effectiveness			
Strategy	Indicator	Status 2015-16	Trend
Weed management	Weed extent	0.4 ha	Flat
	Treatment extent (hectares)	0.4 ha	Flat
Fire management	Number of unplanned fires	0	Flat
Access management	Reportings / evidence of illegal entry	High	Increase
Community engagement	# events at the Reserve	1	Increase
	# of volunteer activities at the Reserve	3	Increase


Cover image: Supporters at the Flat Rock Reserve Open Day Photo: Chris Crerar.


MONITORING SUMMARY


Dry Eucalypt Forest and Woodland		Status: Good
Goal: Floristic diversity of vegetation is maintained and structural complexity is improved		Outcome: On Track
Target Description: Dry sclerophyll forest and woodland communities can be divided into 11 distinct vegetation communities with four of these identified as threatened in Tasmania. The dry sclerophyll forest and woodland communities provide essential habitat for all of the threatened plant and animal species known on the Reserves. A long history of timber harvesting has caused significant degradation to some areas Flat Rock Reserve and there is a large network of tracks that are causing erosion due to the steepness of the terrain. Despite these impacts, most of the Reserve is in good condition.		 <p>Grassy woodland at Flat Rock Reserve. Photo: Andy Townsend</p>
Ecological indicator	Current status	Trend
Floristic diversity	8.6 species/site	Unknown
Structural complexity	5 strata/site	Unknown
Canopy recruitment	2.7 cohorts per site	Unknown
Vertebrate fauna diversity	5.25 species per site 14 species total	Unknown
Key findings <ul style="list-style-type: none"> Floristic diversity of vegetation across the Reserve is highly variable. Areas of <i>Eucalyptus tenuiramis</i> forest and <i>Eucalyptus obliqua</i> forest occur on poorer soils and have a depauperate understorey vegetation. In contrast, areas of <i>Eucalyptus globulus</i> forest occur on fertile dolerite soils and support diverse flora. The vegetation structure has been extensively modified in some areas by logging and firewood collecting. This has reduced the density of mature trees and fallen timber. These structures provide important habitat for a range of fauna. Low productivity areas of the property will take a long time to regenerate. Recruitment of canopy species across the reserve is high, due to the disturbance associated with logging. Bettong were recently common on the Reserve but were not picked up during 2014-15 monitoring, nor by the UTAS pilot project. 		
Recommendations <ul style="list-style-type: none"> Prevent unauthorised access to the Reserve, which is associated with wood hooking. Conduct ecological or fuel reduction burns mostly in productive grassy woodlands that have not been significantly impacted by logging and wood hooking. Source historical data on bettong populations from Matt Pauza (DPIPWE) 		


Community connection with the landscape		Status: Very Good
Goal The community has opportunities to connect with the landscape through recreation, education, research and volunteering		Outcome: On Track
Target Description: Flat Rock Reserve provides the community with a range of recreational, educational, research and volunteering opportunities. Volunteers have made a fantastic contribution to TLC efforts to eradicate weeds and rehabilitate roads for almost ten years. Each year a steady stream of students and visitors continue to appreciate the Reserves unique environments.		 <p>Visitors bushwalking at the Flat Rock Reserve Open Day 2016. Photo: Chris Crerar.</p>
Community indicator	Current status	Trend
Volunteer days	51 vol/days	Flat
Visitors	100+	Unknown
Research and education	1 project	Increase
Key findings <ul style="list-style-type: none"> A team of 5 TLC volunteers spent one day working on weed control, and an International Student Volunteer team (8 volunteers) worked on weed control, rubbish removal and track rehabilitation for five days. Six volunteers assisted with establishing ecological monitoring sites and collecting and analysing data. Bushwalkers regularly access the reserve from Chauncy Vale. TLC hosted an Open Day at Flat Rock and Chauncy Vale in April 2016 with >100 visitors attending the specialist talks at key sites across the reserves. 		
Recommendations <ul style="list-style-type: none"> Continue to encourage community connections to the reserve by providing opportunities for research, education, recreation and volunteering Consider removing this from individual reserve management plans and reporting all relevant TLC activities across Tasmania in a separate report. This approach will be easier to report, more reflective of changes over time, and is a goal of TLC's Strategic Plan. 		

MANAGEMENT EFFECTIVENESS SUMMARY

Access management		
Key objective(s) <ul style="list-style-type: none"> No unauthorised access to the Reserve by 2018 		Status 2015-16 Minor issues
Strategy description <p>Prior to TLC's ownership of Flat Rock Reserve, there was a long history of people accessing the property without permission to engage in a range of environmentally damaging activities including dumping rubbish, off-road vehicle use and stealing firewood. These activities have caused degradation of the eucalypt forests and resulted in a vast network of unplanned tracks which cause erosion. The majority of these activities (with exception for trail bike riding) were successfully stopped in 2009. The main source of unauthorised access has been the northern boundary of the property, which adjoins a network of roads managed by PWS or private landholders from the Native Corners area. This area is very remote and difficult to police.</p>		<p>Illegal vehicle access is associated with stealing firewood. Photo: TLC.</p> 
Indicator	Current status	Trend
Reportings/evidence of illegal entry	High	Increase
Progress in 2015-16 <ul style="list-style-type: none"> Unauthorised access has increased, with the first firewood theft occurring in 7 years. If left to continue, this presents a threat to the Reserves values. Sources of unauthorised access have been identified along the northern boundary and via the neighbouring property on East Bagdad Road. Unauthorised access has been discussed with the Parks and Wildlife Service and neighbouring property owners. Tracks have been accurately mapped. Rehabilitation of unneeded roads has continued. 		
Key recommendations for future management <ul style="list-style-type: none"> Construct additional vehicle barriers along the northern boundary of the Reserve and East Bagdad Road to reduce illegal access. Continue to rehabilitate tracks not needed for reserve management or recreation. 		

Weed management		
Key objective(s) <ul style="list-style-type: none"> Known infestations of weeds are eradicated from the Reserve by 2020 		Status 2015-16 On-track
Strategy description Most of Flat Rock Reserve is weed free. The exception is an area near East Bagdad Road, where dumping of garden waste over many years has created a diverse infestation of weeds including broom, hemlock, mignonette and California thistle.	Most of Flat Rock Reserve is weed-free. Photo: Andy Townsend. 	
Indicator	Current status	Trend
Weed extent	0.4 ha	Flat
Treatment extent (hectares)	0.4 ha	Flat
Progress in 2015-16 <ul style="list-style-type: none"> Broom near the Reserve gate and down Doggie's Gully was cut and pasted and hand pulled in July and November 2015. Hemlock near the Reserve gate was hand-pulled or sprayed in November 2015. Areas previously treated for Californian thistles were searched in November 2015 and no thistles were found. Californian thistles sprayed at Chauncy Vale along Brown's Caves Creek in November 2014 were checked, and showed a very high success rate. Weed mapping will be updated. 		
Key recommendations for future management <ul style="list-style-type: none"> Continue to manage and map weed infestations. 		

Community engagement		
Key objective(s) <ul style="list-style-type: none"> TLC provides opportunities for the community to experience or benefit from the Reserve 		Status 2015-16 On-track
Strategy description <p>The aim of this strategy is to engage with local communities and with the wider Tasmanian community. This will occur through a variety of means including open days. TLC will encourage public access to the Reserve for recreation.</p> <p>The TLC provides opportunities for the community and individuals to achieve conservation. The local community, volunteers, the indigenous community and other stakeholders are encouraged to participate in planning and land management activities. TLC Reserves provide excellent opportunities for education and scientific research. Sustainable economic development may be supported at some reserves where appropriate.</p>	 <p>TLC staff explain photo monitoring to visitors at the Open Day. Photo: Chris Crerar.</p>	
Indicator	Current status	Trend
# events at the Reserve	1	Increase
# of volunteer activities at the Reserve	3	Increase
Progress in 2015-16 <ul style="list-style-type: none"> TLC ran a successful Open Day at Flat Rock and Chauncy Vale, with >100 people attending. Opportunities were provided to volunteers for several reserve management and monitoring activities. Many visitors use the bushwalk up into Flat Rock Reserve from Chauncy Vale. Volunteer, Marie Brolev, drafted a visitor guide to the Reserve. TLC continues to work with the Chauncy Vale Management Committee and other neighbours to ensure cross-tenure land management issues are addressed. The neighbours who access their house via Flat Rock Reserve are moving and selling their land. 		
Key recommendations for future management <ul style="list-style-type: none"> Continue to provide opportunities for people to connect with the Reserve, both directly and indirectly. Continue to maintain relationships with neighbours, including advising potential new neighbours on access arrangements and cross-tenure land management issues (e.g. fire). Finalise the visitor guide and promote the Reserve as a destination for recreation. Consider removing this from individual reserve management plans and reporting all relevant TLC activities across Tasmania in a separate report. This approach will be easier to report, more reflective of changes over time, and is a goal of TLC's Strategic Plan. 		

Fire management		
Key objective(s) <ul style="list-style-type: none"> No unauthorised fires occur on the reserve (ongoing). 		Status 2015-16 On-track
Strategy description Fire is an important ecological process in dry eucalypt forest ecosystems, such as those found at Flat Rock Reserve. However, unplanned fires present a threat to both the natural values and humans. TLC aims to manage risks associated with fire strategically and through working with fire agencies, institutional partners, landholders and others stakeholders.	 <p>Fire has been absent from most of Flat Rock Reserve for more than 30 years. Photo: Andy Townsend.</p>	
Indicator	Current status	Trend
No. of unplanned fires	0 unplanned fires	Flat
Progress in 2015-16 <ul style="list-style-type: none"> There were no unauthorised fires on the Reserve in 2015-16 A fire risk assessment was completed for all TLC reserves. A fire management policy for all TLC Reserves is being implemented. A fuel stove only policy is also being implemented. TLC will participate in a strategic burning program being implemented by the Tasmania Fire Service, with an Operational Burn plan having already been developed and approved for an autumn burn when weather and fuel conditions are suitable. Roads were checked for access and maintained in a safe condition for 4WD vehicles. 		
Key recommendations for future management <ul style="list-style-type: none"> Conduct an autumn fuel reduction/ecological burn when weather and fuel conditions are suitable. Continue to implement a fuel stove only policy for the Reserve. 		