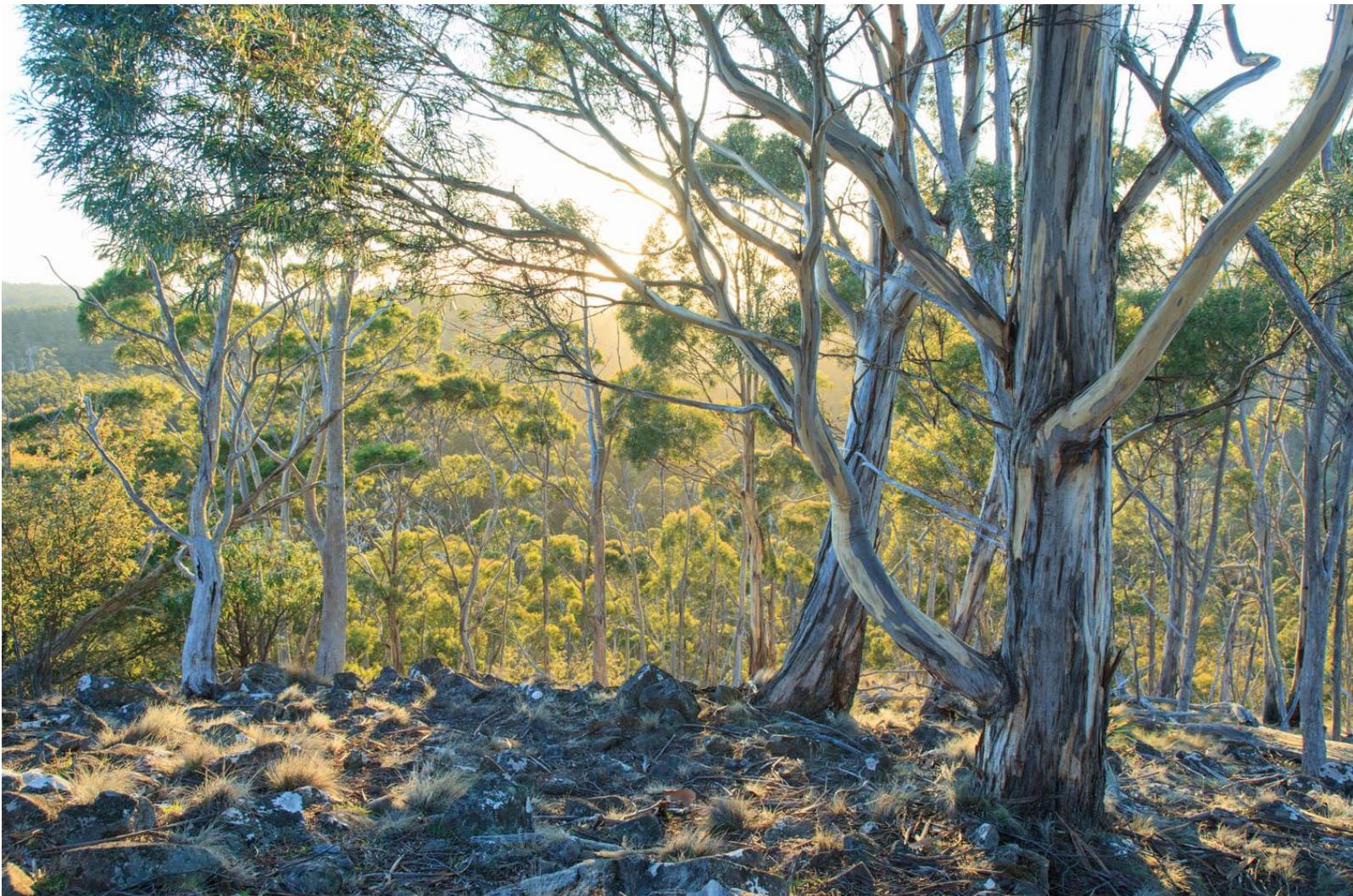




# Annual Reserve Report

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## Flat Rock Reserve 2014-15



[www.tasland.org.au](http://www.tasland.org.au)

## 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 2014-15, 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

<b>Monitoring</b>			
<b>Target</b>	<b>Indicator</b>	<b>Status 2014-15</b>	<b>Trend</b>
Dry eucalypt forest and woodland	Floristic diversity	8.6 species/site	N/A baseline data
	Structural complexity	5 strata/site	
	Vertebrate fauna diversity	5.25 species per site 14 species total	
Community connection to landscape	# volunteer days on the Reserve	22 days	
	# visitors to the Reserve	100+	
<b>Management Effectiveness</b>			
<b>Strategy</b>	<b>Indicator</b>	<b>Status 2014-15</b>	<b>Trend</b>
Weed management	Weed extent	0.4 ha	Decrease
	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	0	Flat
	# of volunteer activities at the Reserve	3	Up

## MONITORING SUMMARY

### Dry eucalypt forest and woodland

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 excellent condition and there are areas of woodland and rockplate grassland that are exceptionally scenic, with views of the lower Derwent Valley and surrounding mountains.

#### Goals

Maintain species diversity in the dry sclerophyll forest and woodland communities.

Improve structural complexity of vegetation



Grassy woodland at Flat Rock

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

- Floristic diversity of vegetation across the Reserve is highly variable. This reflects natural variation expected to occur amongst the diverse forest and woodland types present on the Reserve. Areas of *Eucalyptus tenuiramis* forest and *Eucalyptus obliqua* forest occur on poorer soils and have a depauperate understorey vegetation. In contrast, areas of *Eucalyptus globulus* 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 by this year's monitoring, nor by the UTAS pilot project

#### Recommendations

- 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**

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 small but steady stream of students and visitors continue to appreciate the Reserves unique environments.

**Goal**

People visit Flat Rock Reserve every year for recreation, education, research and volunteering.



ISV volunteers

Community indicator	Current status	Trend
Volunteer days	25 volunteer days	Flat
Visitors	100+	Unknown
Research and education	1 project	Increase

**Key findings**

- A team of 5-10 volunteers spent two days working on weed control
- Six volunteers assisted with establishing ecological monitoring sites and collecting and analysing data
- Bushwalkers regularly access the reserve from Chauncy Vale
- A University of Tasmania PhD student assessed the suitability of the Reserve for bettong research

**Recommendations**

- Continue to encourage community connections to the reserve by providing opportunities for research, education, recreation and volunteering

## MANAGEMENT EFFECTIVENESS SUMMARY

### Access management

There is a long history of people accessing Flat Rock Reserve without permission to engage in a range of environmentally damaging activities including theft, 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 main source of unauthorised access is the northern boundary of the property, which adjoins a network of roads managed by PWS or private landholders. This area is very remote and difficult to police.

### Key objective(s)

No unauthorised access to the Reserve by 2018



Illegal access is often associated with stealing firewood

### Outcome 2015

Unauthorised access has increased and presents a serious threat to the Reserves values

### Progress in 2014-15

- Sources of unauthorised access has 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
- Tracks have been accurately mapped
- Restoration of unneeded roads has continued

### Key recommendations for future management

- Construct additional vehicle barriers along the northern boundary of the Reserve and East Bagdad Road
- Continue to revegetation tracks not needed for reserve management or recreation

**Weed management**

Most of Flat Rock Reserve is weed free. The exception is an area bordering East Bagdad Road, where dumping of garden waste over many years has created a diverse infestation of weeds including broom, spanish heath, hemlock and California thistle.

**Key objective(s)**

Known infestations of weeds are eradicated from the Reserve by 2020

**Outcome 2014-15**

The area of weeds has been reduced to less than 1 ha



A weed dwelling lizard

**Progress in 2014-15**

- Broom near the Reserve gate and down Doggie's Gully was cut and pasted and hand pulled in October 2014.
- Thistles were sprayed at Chauncy Vale along Brown's Caves Creek in November 2014. Weed mapping will be updated.

**Key recommendations for future management**

- Update weed mapping

**Community engagement**

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.

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.

**Key objective(s)**

TLC provides regular opportunities to the community for recreation, volunteering, research and education



International student volunteers collecting rubbish

**Outcome 2014-15**

TLC provided opportunities for than 30 people to visit the Reserve and participate in a variety of volunteering, education and recreational activities.

**Progress in 2014-15**

- Volunteer opportunities were provided to 10 International Student Volunteers
- TLC has supported a UTas PhD research project investigating bettongs
- Volunteer Marie Brolev has prepared a draft visitor guide to the Reserve
- Key Friends of Chauncy Vale volunteers have been assisting with Flat Rock Reserve management

**Key recommendations for future management**

- Continue to provide opportunities for people to connect with the Reserve.
- Continue to maintain relationships with neighbours
- Finalise the visitor guide and promote the Reserve as a destination for recreation

**Fire management**

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 institutional partners, landholders and others stakeholders.

**Key objective(s)**

No unauthorised fires occur on the reserve (ongoing)

**Outcome 2015**

A fire risk assessment has been finalised for all TLC Reserves



Sign at Flat Rock outlining conditions of entry: photo TLC

**Progress in 2014-15**

- TLC has entered discussions with the Tasmanian fire management authority about a strategic burning program for the surrounding region.
- A fuel reduction / ecological burn is being considered for areas of grassy woodland.

**Key recommendations for future management**

- Continue to implement the TLCs fire management policy and procedures
- Continue to liaise with neighbours over fire management
- Continue discussions with TFS about strategic burning in the region