



# **Annual Reserve Report**

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Silver Peppermint Reserve 2014-15



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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 5 key steps – planning, implementing, monitoring, reporting, review/adaptation and communication.

Silver Peppermint Reserve was acquired by the TLC in 2003 and protects 40 hectares of dry heathy *Eucalyptus tenuiramis* forest in the Derwent Valley near Ellendale. The management of the Reserve is guided by the Silver Peppermint 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 management effectiveness and ecological monitoring to date;
2. Ecological Monitoring Summary – providing details of the status of conservation targets and trends of key ecological indicators
3. Management Effectiveness Summary – providing details of the implementation of key management strategies and making recommendations for plan improvement;

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.

## SILVER PEPPERMINT RESERVE SCORECARD

Monitoring				
Target	Indicator	Status 2014	Status 2013	Trend
Dry heathy forest	Floristic diversity	8.9 species/site	4.5 species/site	Increase
	Structural complexity	8.7 strata/site	6.7 strata/site	Increase
	Canopy species recruitment	2.6 cohorts per site	2.6 cohorts/site	Flat
	Vertebrate fauna diversity	0.68 species/camera/day	No data	Baseline survey – trend unknown
	Bird diversity	16 species/visit	13 species/visit	Increase
Community connection to landscape	# volunteer days on the Reserve	14	5 (approx.)	Increase
	# visitors to the Reserve	80+	10 (approx.)	Increase
Management Effectiveness				
Strategy	Indicator	Status 2015	Status 2014	Trend
Access control	Evidence of unauthorised access	None	Occasional	Decrease
Fire management	Number of unplanned fires	0	1	Decrease
Stock exclusion	Instances of stock access	0	0	Flat
Community engagement	# events at the Reserve	0	1	Decrease
	# of volunteer activities at the Reserve	1	2	Decrease



## ECOLOGICAL MONITORING SUMMARY

### Target – Dry Heathy Forest

Dry heathy forest on the Reserve has been degraded by a long history of woodhooking and frequent burning. Woodhooking has targeted dead standing and fallen trees, resulting in a lower proportion of habitat trees with hollows than would otherwise be expected in this environment. Prior to acquisition by TLC, the Reserve was likely burnt every few years to encourage 'green pick' for grazing. A deliberately lit fire burnt about 25% of the Reserve in 2007 and in January 2013 a severe bushfire burnt the entire Reserve. This has resulted in reduced structural complexity and floristic diversity in the vegetation and a very high density of bracken fern in the understorey.

### Goals

- Increase the floristic diversity by 20% by 2020
- Increase the structural complexity by 20% by 2020
- Increase the recruitment of canopy species by 20% by 2020
- Maintain the extent of coastal woodland within 10% (ongoing)
- Increase the diversity of vertebrate fauna by 10% by 2020



Mountain dragon

Ecological indicator	Status 2014-15	Trend
Floristic diversity	8.9 species/site	Increase from 4.5 species per site in July 2013
Structural complexity	8.7 strata/site	Increase from 6.7 strata per site in July 2013
Canopyspecies recruitment	2.6 cohorts per site	No change since July 2013
Vertebrate fauna diversity	0.68 species/camera/day	Baseline survey – trend unknown

### Key findings

- Observed floristic diversity has increased significantly since July 2013. However, a rapid post-bushfire increase in diversity is expected, as seed germinates and vegetation recovers.
- Structural complexity of vegetation is increasing post-fire, but the diverse shrubs that normally characterise this vegetation type are still largely absent, while bracken fern forms a dense layer at most monitoring sites.
- A high population of wallabies, wombats and Brushtail possums have re-colonised the Reserve post fire. However, monitoring failed to capture any native carnivorous species such as quolls, devils or bandicoots.

### Recommendations

- Determine the status of native carnivores on the property by monitoring with baits.
- Implement management practices that discourage woodhooking and unplanned fire.

## MANAGEMENT EFFECTIVENESS SUMMARY

### Access Control

Unregulated access has caused significant impacts to some TLC Reserves. Unauthorised access continues to be an issue at some Reserves. Unauthorised access is associated with a range of activities that impact on the natural values of a Reserve, including hunting, wood-hooking, campfires, dumping of rubbish, and damage to infrastructure such as gates and fences, and off-road vehicle use. A variety of mechanisms are used to regulate access including infrastructure such as fences and gates, information provided in signs, and direct communication with the local community and potential visitors.

The aim of this strategy is to prevent illegal access to the Reserve. Illegal access to the property has been occurring for many years on the Silver Peppermint Reserve and is associated with arson, vandalism, dumping of rubbish/greenwaste, and illegal removal of firewood. The TLC will take actions to prevent unauthorised access to the property in the future.

### Key objective(s)

No unauthorised access by 2015

### Outcome 2014-15

A new fence has stopped wood hooking



Woodhooking continues to be a problem at the Reserve

### Progress in 2014-15

- A new barrier fence has been constructed along Rockmount Road to discourage wood hookers, with funding from a grant received from NRM South. It seems to be working.

### Key recommendations for future management

- Maintain barrier fence along Rockmount Road

**Fire Management**

An excessively high frequency of bushfires has reduced the condition of the vegetation and a severe bushfire in 2013 burnt the entire Reserve. The lighting of fires will not be permitted at Silver Peppermint Reserve and TLC will work with neighbours, the PWS and the TFS to reduce the risk of unplanned fires.

**Key objective(s)**

No unplanned fires occur on the reserve (ongoing)

**Outcome 2014-15**

No fires in 2014-15



TLC scientists monitor vegetation recovery following the 2013 bushfire

**Progress in 2014-15**

- An organisation Fire Management Strategy has been finalised

**Key recommendations for future management**

- Implement Fire Management Strategy

**Stock exclusion**

Livestock are grazed on neighbouring properties to the north, west and south of Silver Peppermint Reserve. Livestock have the potential to reduce vegetation condition. Existing fences prevent stock from accessing the reserve. Fence condition will be checked during the annual reserve assessment and fences will be repaired as necessary.

**Key objective(s)**

Access by neighbouring stock is prevented (ongoing)

**Outcome 2014-15**

No stock access was detected in 2015



Fences damaged by fire have been replaced

**Progress in 2014-15**

- Boundary fences were assessed, fallen branches were removed and repairs were made to the northern boundary fence
- Areas where fencing needs to be upgraded post-fire have been identified

**Key recommendations for future management**

- Maintain fences



**Annual threat assessment**

An annual reserve assessment is conducted by TLC Reserve Management Staff. The aim of the assessment is to identify any new threatening processes that have the potential to reduce the viability of the targets. Potential threats at Silver Peppermint Reserve include weeds such as gorse and thistle, which are widespread in the local area, and livestock incursions from the neighbouring property, which is grazed by sheep and cattle.

**Key objective(s)**

All potential threats are assessed and reported annually

**Outcome 2014-15**

The threat of weeds post-fire has abated

California thistle was identified on the Reserve this year

**Progress in 2014-15**

- Annual assessment was completed in July 2015. Weeds seem to have reduced as the forest continues to regenerate

**Key recommendations for future management**

- Continue to monitor and control weeds