



Annual Reserve Report

Silver Peppermint 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 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 2015-16, 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 2014-15	Trend
Dry heathy forest	Floristic diversity	8.9 species/site	Repeat data collection scheduled for 2016
	Structural complexity	8.7 strata/site	
	Canopy species recruitment	2.6 cohorts per site	
	Vertebrate fauna diversity	0.68 species/camera/day	
	Bird diversity	16 species/visit 23 species/visit 2015/16	Increase in 2015-16
Target	Indicator	Status 2015-16	Trend
Community connection to landscape	# volunteer days on the Reserve	1	Decrease
	# visitors to the Reserve	4	Decrease
Management Effectiveness			
Strategy	Indicator	Status 2015-16	Trend
Access control	Evidence of unauthorised access	None	Decrease
Fire management	Number of unplanned fires	0	Decrease
Stock exclusion	Instances of stock access	0	Flat
Weed management	Weed extent	~20 ha	Improving
	Weed density	Moderate	Improving


Cover image: Silver Peppermint Reserve showing recovery post fire. Photo: Sally Bryant


ECOLOGICAL MONITORING SUMMARY


Dry Heathy Forest		Status: Good
Goals <ul style="list-style-type: none"> - Structural complexity has increased by 20% by 2020. - Floristic diversity is maintained 		Outcome: On Track
Description The Reserve protects dry eucalypt forest dominated by silver peppermint, white gum and brown-topped stringy bark. A long history of wood-hooking and frequent burning has resulted in reduced structural complexity and floristic diversity in the vegetation and a very high density of bracken fern in the understorey.		 <p>Mountain dragon. Photo: TLC</p>
Ecological indicator	Status 2014-15	Trend
Floristic diversity	8.9 species/site	Repeat data collection scheduled for 2016
Structural complexity	8.7 strata/site	
Canopyspecies recruitment	2.6 cohorts per site	
Vertebrate fauna diversity	0.68 species/camera/day	
Bird diversity	16 species/visit	2015 - 23 species / visit -Increase
Key findings <ul style="list-style-type: none"> • 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. • Bird species diversity is steadily increasing as surrounding vegetation recovers post fire. • 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 brush-tailed possums have re-colonised the Reserve post fire. However, monitoring failed to capture any native carnivorous species such as quolls, devils or bandicoots. 		
Recommendations <ul style="list-style-type: none"> • Determine the status of native carnivores on the property by monitoring with scent lures. • Implement management practices that discourage wood-hooking and unplanned fire. 		


Community Connection to the Landscape		Status: Good
Goal: The community has opportunities to connect with the landscape through research, volunteering, education and recreation (ongoing)		Outcome: Minor issues
Target Description: 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.		Volunteers assist staff with blocking illegal access tracks. Photo: Denna Kingdom 
Community indicator	Current status	Trend
Volunteer days	5	Decrease
No. of visitors	4	Decrease
Key findings <ul style="list-style-type: none"> • A volunteer assisted TLC with weed control for one day. • Visitor safety is an issue off-track due to falling limbs from burnt trees. • No supporters requested to visit Silver Peppermint Reserve in 2015-16 – this may be due to the loss of aesthetic appeal following the 2013 fire. • The Save the Devil Team continues to visit the property annually to monitor the Tasmanian devil population. • 3 volunteers assisted with ecological monitoring for 1 day 		
Recommendations <ul style="list-style-type: none"> • Continue to encourage community connections to the reserve by providing opportunities for research, education, recreation and volunteering. • Develop and implement a system for reporting all visitors to TLC Permanent Reserves. • Continue to maintain relationships with neighbours. • 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 Control		
Key objective(s) <ul style="list-style-type: none"> No unauthorised access by 2016 		Status 2015-16 On-track
Strategy description <p>The aim of this strategy is to prevent illegal access to the Reserve. Unregulated access has caused significant impacts to some TLC 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, damage to infrastructure (such as gates and fences) and off-road vehicle use. Rockmount Road passes through Silver Peppermint Reserve, allowing public access to the property. The relative isolation of the Reserve allows people to undertake illegal activities undetected.</p>	 <p>New entry sign to Silver Peppermint Reserve. Photo: TLC</p>	
Indicator	Current status	Trend
Evidence of unauthorised access	None	Decrease
Progress in 2015-16 <ul style="list-style-type: none"> A barrier fence constructed along Rockmount Road in May 2015 was maintained. No evidence of illegal access or theft of firewood was detected in 2015-16. 		
Key recommendations for future management <ul style="list-style-type: none"> Maintain barrier fence along Rockmount Road 		

Fire management		
Key objective(s) <ul style="list-style-type: none"> No unplanned fires occur on the reserve (ongoing). 		Status 2015-16 On-track
Strategy description 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.	 <p>Volunteers help with post fire monitoring in Dec. 2015. Photo: TLC</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. 		
Key recommendations for future management <ul style="list-style-type: none"> Implement TLC Fire Management Policy. Continue to implement a fuel stove only policy for the Reserve. 		

Stock exclusion		
Key objective(s) <ul style="list-style-type: none"> Access by neighbouring stock is prevented (ongoing) 		Status 2015-16 On-track
Strategy description 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 annually and fences will be repaired as necessary.	 <p>Boundary fencing damaged by the 2013 fire. Photo: TLC</p>	
Indicator	Current status	Trend
No stock access the reserve	No stock access	Flat
Progress in 2015-16 <ul style="list-style-type: none"> No stock access was detected in 2015-16. Boundary fences were assessed, fallen branches were removed. Fencing damaged by fire was repaired. 		
Key recommendations for future management <ul style="list-style-type: none"> Continue to monitor fences and repair fences when necessary. 		

Weed management		
Key objective(s) <ul style="list-style-type: none"> Weed infestations have received primary treatment by 2016 		Status 2015-16 On-track
Strategy description Infestations of thistles (several species) occur across the reserve, with higher densities occurring in areas where fire has removed the tree canopy. Weeds have the potential to become much more widespread on the Reserve, but are likely to reduce in number as the tree canopy re-establishes. Reducing the density of weeds will assist with the re-establishment of a healthy, native plant understorey.	 <p>Dense thistle infestation at the Reserve. Photo: Denna Kingdom</p>	
Indicator	Current status	Trend
Weed extent	~20 ha	Improving
Weed density	Moderate	Improving
Progress in 2015-16 <ul style="list-style-type: none"> Areas of high density thistle infestation (primarily west of the main road) received follow-up weed treatment in 2015-16. 		
Key recommendations for future management <ul style="list-style-type: none"> Continue follow-up weed control at known infestations. Record and treat any new weed infestations. 		