



# Annual Reserve Report

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## Flat Rock Reserve 2016-17



[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. The TLC has adopted an adaptive management framework – the Open Standards for the Practice of Conservation which 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 on [www.tasland.org.au](http://www.tasland.org.au).

This report describes progress made towards delivery of the management plan in 2016-17, 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 2016-17

| Ecological Monitoring             |  |   |                                 |
|-----------------------------------|--|---|---------------------------------|
| Target                            | Indicator                              | Status 2014-15                            | Trend                           |
| Dry eucalypt forest and woodland  | Floristic diversity                    | 8.6 species/site                          | Baseline data collected in 2014 |
|                                   | Structural complexity                  | 5 strata/site                             |                                 |
|                                   | Vertebrate fauna diversity             | 5.25 species per site<br>14 species total | Repeat data scheduled for 2019  |
| Management Effectiveness          |  |   |                                 |
| Strategy                          | Indicator                              | Status 2016-17                            | 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 | Unknown                                   | Unknown                         |
| Community connection to landscape | # volunteer days on the Reserve        | 24  | Stable                          |
|                                   | # visitors to the Reserve              | 100+                                      | Unknown                         |
|                                   | # of events / projects                 | 1   | Stable                          |


Cover image: View from the Flat Rock Reserve to Mt Wellington Range Photo: TLC

## MONITORING SUMMARY

|  |   |  |
|--|---|--|
| <b>Dry Eucalypt Forest and Woodland</b>  |   | <b>Status: Good</b>  |
| <b>Goal:</b><br>Floristic diversity of vegetation is maintained and structural complexity is improved  |   | <b>Outcome: On Track</b>   |
| <b>Target Description:</b><br>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> |
| <b>Ecological indicator</b>  | <b>Status 2014-15</b>                     | <b>Trend</b>   |
| Floristic diversity  | 8.6 species/site                          | Unknown – repeat survey due 2019   |
| Structural complexity  | 5 strata/site                             | Unknown – repeat survey due 2019   |
| Canopy recruitment   | 2.7 cohorts per site                      | Unknown – repeat survey due 2019   |
| Vertebrate fauna diversity   | 5.25 species per site<br>14 species total | Unknown – repeat survey due 2019   |
| <b>Key findings</b> <ul style="list-style-type: none"> <li>No actions occurred in 2016-17 likely to impact vegetation. 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.</li> <li>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.</li> <li>Recruitment of canopy species across the reserve is high, due to the disturbance associated with logging.</li> <li>Bettong were recently common on the Reserve but were not picked up during 2014-15 monitoring, nor by the UTAS pilot project.</li> </ul> |   |  |
| <b>Recommendations</b> <ul style="list-style-type: none"> <li>Prevent unauthorised access to the Reserve, which is associated with wood hooking.</li> <li>Conduct ecological or fuel reduction burns mostly in productive grassy woodlands that have not been significantly impacted by logging and wood hooking.</li> <li>Source historical data on bettong populations from Matt Pauza (DPIPWE)</li> </ul>   |   |  |



## MANAGEMENT EFFECTIVENESS SUMMARY

|   |  |  |
|---|--|--|
| <b>Access management</b>  |  |  |
| <b>Key objective(s)</b> <ul style="list-style-type: none"> <li>No unauthorised access to the Reserve by 2018</li> </ul>   |  | <b>Status 2016-17</b><br><b>Minor issues</b> |
| <b>Strategy description</b><br><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>Signage outlining use of the Flat Rock Reserve. Photo: TLC.</p>  |  |
| <b>Indicator</b>  | <b>Current status</b>  | <b>Trend</b>                                 |
| Reportings/evidence of illegal entry  | Unknown  | Unknown                                      |
| <b>Progress in 2016-17</b> <ul style="list-style-type: none"> <li>No unauthorised access was observed or reported in 2016-17, however this is likely due to the decreased observations by the neighbours travelling through the Reserve to access their property. Typically illegal access decreases if people doing the right thing are seen to be there; it is important to ensure that visitors are encouraged to visit and report activities that may be illegal.</li> <li>The unauthorised access point identified along the northern boundary in 2016 was blocked off, and there is no evidence of it being used since.</li> <li>Unauthorised access has been discussed with the Parks and Wildlife Service and neighbouring property owners.</li> <li>Vehicle track maintenance was undertaken along the main track following damage from heavy rain in July 2016. Rehabilitation of unneeded roads has continued, with an International Student Volunteer team assisting with this work for one day.</li> </ul> |  |  |
| <b>Key recommendations for future management</b> <ul style="list-style-type: none"> <li>Continue to rehabilitate tracks not needed for reserve management or recreation.</li> <li>Continue to encourage visitors to be vigilant of illegal use and report observations to TLC.</li> </ul>   |  |  |

|  |                                    |  |
|--|------------------------------------|--|
| <b>Weed management</b>   |                                    |  |
| <b>Key objective(s)</b> <ul style="list-style-type: none"> <li>Known infestations of weeds are eradicated from the Reserve by 2020</li> </ul>  |                                    | <b>Status 2016-17</b><br><b>On-track</b>   |
| <b>Strategy description</b><br>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.                             | Flat Rock Reserve weed data sheet. |  |
|  | <b>Location</b>                    | As per map 14/10/2016.<br><br>Heading east from boom gate at East Bagdad Road and clearing 300m southeast of gate. |
|  | <b>Targeting</b>                   | Thistles: spear, slender (?), Californian, variegated, sow.  |
|  | <b>Primary or follow up</b>        | Primary  |
|  | <b>Visitor control</b>             | Boom gate locked closed; residential neighbour (Tim Hankey) advised in person of spraying activities.              |
|  | <b>Vehicle</b>                     | TLC Nissan Navara twin cab ute   |
|  | <b>Driver</b>                      | Denna  |
| <b>Indicator</b>   | <b>Current status</b>              | <b>Trend</b>   |
| Weed extent  | 0.4 ha                             | Flat   |
| Treatment extent (hectares)  | 0.4 ha                             | Flat   |
| <b>Progress in 2016-17</b> <ul style="list-style-type: none"> <li>Broom near the Reserve gate and down Doggie's Gully was cut and pasted and hand pulled in July 2016.</li> <li>Hemlock near the Reserve gate was hand-pulled or sprayed in November 2015.</li> <li>Weed mapping was updated.</li> </ul> |                                    |  |
| <b>Key recommendations for future management</b> <ul style="list-style-type: none"> <li>Continue to manage and map weed infestations.</li> </ul>   |                                    |  |

## Fire management

### Key objective(s)

- No unauthorised fires occur on the reserve (ongoing).

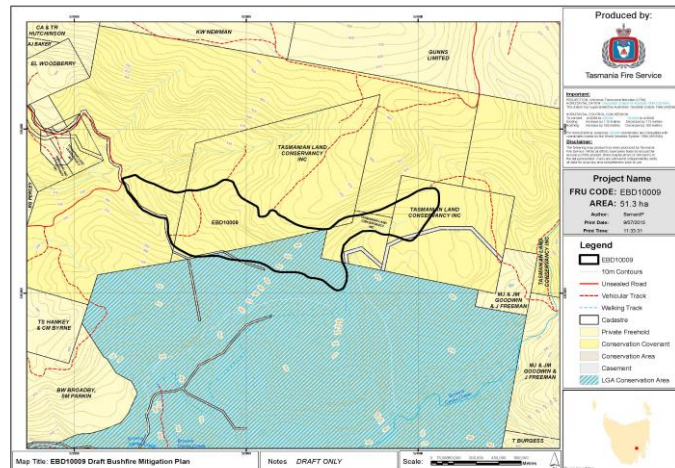
**Status 2016-17**

**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.

Draft Flat Rock burn plan Photo: TLC.



### Indicator

### Current status

### Trend

No. of unplanned fires

0 unplanned fires


Flat

### Progress in 2016-17

- There were no unauthorised fires on the Reserve in 2016-17
- 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.
- A whole-of-TLC fire management strategy is being developed to ensure all TLC properties are effectively managed from threats relating to fire, and that fire is used appropriately as a tool to manage the values of TLC properties.

### Key recommendations for future management

- 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.
- Continue to develop the whole-of-TLC fire management strategy.

|   |                       |  |
|---|-----------------------|--|
| <b>Community connection with the landscape</b>  |                       | <b>Status: Very Good</b>   |
| <b>Goal</b><br>The community has opportunities to connect with the landscape through recreation, education, research and volunteering   |                       | <b>Outcome: On Track</b>   |
| <b>Target Description:</b><br>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>New signage at Flat Rock Photo: TLC</p> |
| <b>Community indicator</b>  | <b>Current status</b> |  |
| Volunteer days  | 24 vol/days           | Flat   |
| Visitors  | 100+                  | Unknown  |
| Research and education  | 1 project             | Increase   |
| <b>Key findings</b> <ul style="list-style-type: none"> <li>• An International Student Volunteer team (8 volunteers) worked on weed control, rubbish removal and track rehabilitation for three days.</li> <li>• Bushwalkers regularly access the reserve from Chauncy Vale, although numbers of visitors are not available.</li> <li>• A grant from Southern Midlands Council to develop a visitor brochure and walking track signage from Chauncy Vale to the Flat Rock Lookouts. These will be completed in 2017.</li> <li>• A reserve visitor brochure was finalised, and walking track signage designed, with financial support from a grant from Southern Midlands Council. The signs will be installed in 2017.</li> <li>• TLC continues to work with the Chauncy Vale Management Committee and other neighbours to ensure cross-tenure land management issues are addressed.</li> <li>• The neighbours who access their house via Flat Rock Reserve have moved.</li> </ul> |                       |  |
| <b>Recommendations</b> <ul style="list-style-type: none"> <li>• Continue to encourage community connections to the reserve by providing opportunities for research, education, recreation and volunteering</li> </ul>   |                       |  |