



Annual Reserve Report

Lutregala Marsh 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.

Lutregala Marsh Reserve was acquired by the TLC in 2005 and protects 41.9 hectares of saltmarsh and coastal forest on Bruny Island in southeast Tasmania. The Reserve adjoins the Neck Game Reserve and forms part of a large block of native vegetation that straddles the Bruny Island Isthmus. The management of the Reserve is guided by the Lutregala Marsh 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. Management Effectiveness 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.

LUTREGALA MARSH RESERVE SCORECARD

Monitoring			
Target	Indicator	Status 2014-15	Trend
Saltmarsh	Floristic diversity	No data	Baseline data collection scheduled for 2016
	Structural complexity		
Vertebrate fauna diversity			
Coastal forest	Floristic diversity	No data	
	Structural complexity		
	Canopy recruitment		
Community connection to landscape	# volunteer days on the Reserve	15	
	# visitors to the Reserve	20	
Management Effectiveness			
Strategy	Indicator	Status 2014-15	Trend
Weed management	Weed extent	1 ha	Flat
	Treatment extent (hectares)	0.5 ha	Increase
Stock exclusion	Instances of stock access	0	Flat
Fire management	Number of unplanned fires	0	Flat
Feral animal management	Cat abundance	No data	
Woodland restoration	% native tree cover	No data	
Community engagement	# events at the Reserve	0	
	# of volunteer activities at the Reserve	1	Flat

MONITORING SUMMARY

Saltmarsh

Saltmarsh vegetation occupies the low marsh land around the estuary of Lutregala Creek. Two vegetation types are recognised in this area under the TASVEG classification. These are saline grassland (ARS) and succulent saline hermland (ASS). The vegetation in this area is dominated by grasses and sedges in areas of saline grassland, and by succulent herbs and shrubs in areas of succulent saline hermland.

Goals

- Maintain the floristic diversity of saltmarsh within 25% (ongoing)
- Maintain the structural complexity of saltmarsh within 25% (ongoing)
- Maintain the extent of saltmarsh within 10% (ongoing)
- Maintain the vertebrate fauna diversity of saltmarsh within 25% (ongoing)



Saltmarsh and Lutregala Creek

Ecological indicator	Status 2014	Trend
Floristic diversity	No data	Unknown
Structural complexity	No data	Unknown
Vertebrate fauna diversity	No data	Unknown

Key findings

- Preliminary assessments show that the saltmarsh is in excellent condition. Historic efforts to drain the marshes for agriculture were unsuccessful and have had minimal impact on the hydrology or vegetation.

Recommendations

- Install TLC's ecological monitoring program on Lutregala Marsh reserve.

Coastal woodland

Coastal Forest occupies a relict dune system where a ridge of sandy soil has provided sufficient drainage for trees to establish. Two vegetation types are recognised in this area under the TASVEG classification. These are *Eucalyptus amygdalina* coastal forest (DAC) and *Eucalyptus ovata* forest (DOV). DOV is listed as endangered under the Nature Conservation Act 2002. The vegetation is dominated by a canopy of eucalypt species. Understorey vegetation dominated by tall shrubs, with a dense ground layer of sedges and bracken.

Goals

- Maintain floristic diversity within 20% (ongoing)
- Maintain structural complexity within 25% (ongoing)
- Increase the recruitment of canopy species (ongoing)
- Maintain the extent of coastal forest within 10% (ongoing)
- Maintain the diversity of vertebrate fauna within 10%



Coastal forest

Ecological indicator	Current status	Trend
Floristic diversity	No data	Baseline data collection scheduled for 2016
Structural complexity		
Canopy recruitment		
Vertebrate fauna diversity		

Key findings

- No changes have been observed in the coastal woodland areas, although baseline data collection has not yet occurred (scheduled for 2016).

Recommendations

- Install TLC's ecological monitoring on the reserve.

Community connection with the landscape

Lutregala Marsh 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 blackberries and other weeds on the Reserve. TLC has hosted several supporter trips and is developing visitor guides to encourage visitation.

Goals

- People visit Lutregala Marsh every year for recreation, research, education or volunteering



A team of volunteers helping TLC with weed removal

Community indicator	Current status	Trend
Volunteer days	24 volunteer days	Flat
Visitors	6 visitors	Flat
Research and education	1 project	Decrease

Key findings

- A team of volunteers spent 4 days on blackberry control
- Landcare Tasmania and the Federal Government visited the Reserve to look at outcomes of federally funded projects

Recommendations

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

MANAGEMENT EFFECTIVENESS SUMMARY

Weed management

Blackberry (*Rubus fruticosus*) occurs in areas of regenerating cleared land on the western boundary of the property. Control of this infestation of weeds is a management priority. The TLC has been undertaking annual weed control since 2012. Follow-up weed control will occur for five years following initial treatment. The annual reserve assessment will include weed monitoring to ensure that any new infestations of blackberry or other weeds are identified and controlled.

Key objective(s)

All areas of weeds have been treated by 2017

Weeds are eradicated by 2020

Outcome 2014-15

The area of weeds was reduced from 1ha in 2005 to 0.5ha in 2015



A volunteer helping slash blackberries

Progress in 2014-15

- TLC staff, volunteers and contractors undertook weeding activities, including cut-and-paint of blackberries in forest area along western boundary, and brush cutting large blackberry clumps in open areas along western boundary and near dam. TLC staff also burnt a small clump of blackberries. Wind conditions and fuel conditions were not favourable and the burn was abandoned after test patch.

Key recommendations for future management

- Continue weed control program
- Complete follow up mapping

Stock exclusion

Livestock are grazed on neighbouring properties to the west and south of Lutregala Marsh Reserve. Livestock have the potential to reduce vegetation condition, particularly in saltmarsh areas of the reserve. 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)



Boundary fencing and signage

Outcome 2015

Livestock accessed the Reserve through an unfenced section of boundary

Progress in 2014-15

- Boundary fences were checked and a missing section of fence was installed (100m).

Key recommendations for future management

- Continue to monitor fences and repair fences when necessary.

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)

People visit the Reserve every year for recreation, education and volunteering

Outcome 2015

TLC provided opportunities for than 15 people to visit the Reserve and participate in a variety of volunteering, education and recreational activities



TLC supporters on a working bee

Progress in 2014-15

- TLC hosted a volunteer activity controlling weeds in May 2015
- A draft visitor guide for the Reserve was prepared by volunteer Marie Brolev

Key recommendations for future management

- Continue to provide opportunities for people to connect with the Reserve.
- Continue to maintain relationships with neighbours
- Finalise visitor guide. The most practical visitor access is from Bruny Island Main Rd, via a public reserve administered by the PWS. Permission from will need to be sought prior to finalising the visitor guides. Supporting infrastructure will also be required. Funds for this infrastructure will initially be sought through a local community grant

Feral animal control

Feral cats pose a significant threat to wildlife on the Reserve and in particular to small mammals and ground nesting birds. A feral cat management plan has been prepared by Kingborough Council in collaboration with the Bruny Island Environment Network. TLC will help implement the plan using our Reserve as a key monitoring site.

Key objective(s)

Help implement the Bruny Island Cat Management Plan



Outcome 2015

Monitoring of cats has commenced on Lutregala Reserve

TLC volunteers helping to set cameras for cat monitoring

Progress in 2014-15

- Fauna cameras were set across the reserve in May 2015.
- The reserve was used by UTAS Hons student in an island wide cat survey.
- Feral animal control (especially cats) has been identified as a priority in the Bruny Island cat management plan.
- TLC is on the steering committee for the BI cat management program

Key recommendations for future management

- Manage cats in accordance with the Bruny Island Cat Management Plan, and in partnership with other stakeholders
- Analyse data on cat abundance in 2015/16 and report to the Bruny Island cat management team

Fire management

Controlled burning is currently being trialled as a tool for gorse management in areas where gorse has formed impenetrable stands that are difficult to control by other means. A fire ban in other areas of the Reserve is aimed at reducing further impacts of fire on native vegetation.

Key objective(s)

No unauthorised fires occur on the reserve (ongoing)



TLC LAND MANAGEMENT BURN PLAN

NAME LUTREGALA MARSH - Blackberries western boundary Sep 2014 Burn No 1
Description - Month Year - Burn No. e.g. Long Point Reserve Barkstand Point May 2013 Burn No. 1)

PLANNED BURN

RESERVE LUTREGALA MARSH RESERVE Grid Reference.....
Location Blackberry patches along western boundary

No - Why not?.....

Sensitive assets (e.g. buildings, neighbours, safe evacuation route/nearby safer place, water required), ignition points, control lines, lighting direction and sequence).

DESCRIPTION

Burn Plan Lutregala Marsh weed Mngt Strategy
Area 2 hectares
Purpose Blackberry control

Burn plan

Outcome 2015

A trial burn of blackberries was conducted in 2014

Progress in 2014-15

- A trial burn of blackberries was conducted in 2014. Due to windy conditions the burn was abandoned. Another burn is being considered for later in 2015.
- TLC fire policy and procedures is now being implemented

Key recommendations for future management

- Continue to implement fire management strategy

Woodland restoration

An area of regenerating cleared land on the western margin of the property has been replanted with native tree species. Ongoing weed control works in this area will make more land available for restoration, and TLC intends to establish a diverse planting of local provenance species.

Key objective(s)

Native plant species will be the dominant cover class in the revegetation zone by 2020



Regenerating cleared land proposed for revegetation

Outcome 2015

Restoration plantings are doing well

Progress in 2014-15

- About 20 white gums were planted in 2012. The trees were provided by the Understorey Network. The trees were checked this year and are doing well.

Key recommendations for future management

- Seek funding for further restoration plantings