TASMANIAN
LAND
CONSERVANCY

Annual Reserve Report

Long Point Reserve 2014-15

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

Long Point Reserve was acquired by the TLC in 2005 and protects 386.5 hectares of saltmarsh, coastal grassland and woodland at Moulting Lagoon near Swansea. The Reserve adjoins a Ramsar listed wetland. The management of the Reserve is guided by the Long Point 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.

LONG POINT RESERVE SCORECARD

Monitoring			
Target	***Indicator***	***Status 2014-15***	***Trend***
Saltmarsh	Floristic diversity	2.7 species/site	N/A baseline data
	Structural complexity	3.2 strata/site	
	Vertebrate fauna diversity	0.04 species per trap night	
Coastal woodland	Floristic diversity	5.5 species/site	
	Structural complexity	7.5 strata/site	
	Canopy recruitment	2.1 cohorts per site	
	Vertebrate fauna diversity	0.30 species per trap night	
Coastal grassland	Floristic diversity	4.3 species/site	
	Structural complexity	4.8 strata/site	
	Vertebrate fauna diversity	0.17 species / trap night	
Community connection to landscape	# volunteer days on the Reserve	50 (10 people x 5 days)	
	# visitors to the Reserve	10	
Management Effectiveness			
Strategy	***Indicator***	***Status 2014-15***	***Trend***
Weed management	Weed extent	10 ha	Decrease
	Treatment extent (hectares)	36 ha	Flat
Stock exclusion	Instances of stock access	0	Flat
Fire management	Number of unplanned fires	0	Flat
Feral animal control	Cat abundance	Unknown	
	Rabbit abundance	Unknown	
Woodland restoration	% native tree cover	To be assessed in 2014	
Community engagement	# events at the Reserve	3	Flat
	# of volunteer activities at the Reserve	1	Flat

MONITORING SUMMARY

Saltmarsh

Saltmarsh is the most extensive ecosystem at Long Point. A mosaic of vegetation dominated by succulent species and salt tolerant sedges occupy low lying ground around the margins of Moulting Lagoon. Extensive tidal pools provide important habitat for shore birds, including migratory species. The salt marsh vegetation is in excellent condition and is almost entirely undisturbed. A whitebait aquaculture trial site in the southern part of the reserve has been partially rehabilitated to restore natural tidal inundation patterns. The low diversity of plants and terrestrial vertebrates is to be expected given the habitat type.

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)

Succulent saline herbfield

Ecological indicator	Status 2014	Trend
Floristic diversity	2.7 species/site	Unknown
Structural complexity	3.2 strata/site	Unknown
Vertebrate fauna diversity	0.04 species per trap night	Unknown

Key findings

- Spotted-tailed quolls were recorded in saltmarsh – not expected!
- Weeds are absent from this vegetation type
- Feral cats are present in low numbers
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Recommendations

- Establish monitoring program for coastal bird species with a special focus on shore-birds, waders and migratory species
- Establish cat control program with a focus on saltmarsh, as ground nesting birds are especially susceptible to predation

Coastal woodland

Coastal woodland on the Reserve is in poor condition as a result of a long history of vegetation clearance, frequent burning, the introduction of gorse, and grazing by stock and rabbits. The most obvious effect of past disturbance on the Reserve has been the loss of canopy species such as white gum and black peppermint, and the ongoing decline of remaining trees such as black wattle. The loss of eucalypts across most of the Reserve means that natural regeneration is now impossible. Historic management practices have also reduced the overall structural complexity and floristic diversity of the vegetation. While the impact of changes to the vegetation has had a relatively minor impact on populations of larger terrestrial vertebrates such as wallabies and devils, the impact on woodland bird diversity has been significant.

Goals

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

Woodland revegetation

Ecological indicator	Status 2014-15	Trend
Floristic diversity	5.5 species/site	Unknown
Structural complexity	7.5 strata/site	Unknown
Canopy recruitment	2.1 cohorts per site	Unknown
Vertebrate fauna diversity	0.30 species per trap night	Unknown

Key findings

- Floristic diversity of vegetation is very low
- Structural complexity of vegetation is low. Some of the strata that would be expected in a healthy coastal woodland, such as tall shrubs or diverse native herbs, are absent at Long Point.
- In its natural state, coastal woodland would be dominated by mature eucalypts. At Long Point eucalypts are almost entirely absent and there is no sign of recruitment.
- Populations of native terrestrial vertebrates seem robust, including the Tasmanian devil. Populations of introduced species such as rabbits and cats are relatively low.
- Incidental observation of woodland birds suggests that the diverse suite of species that typically occupies coastal woodland sites has been significantly impacted by changes to the vegetation. Species that do well in degraded landscapes, such as noisy minors and magpies, are present in high numbers.

Recommendations

- Prepare a long term restoration plan that aims to improve the floristic diversity and structural complexity of the vegetation
- Develop a monitoring strategy for woodland birds, using skilled volunteers from the local community. This element of the fauna seems to have been most impacted by woodland degradation at Long Point and will be a key indicator of restoration progress.

Coastal grassland

Coastal grassland at Long Point is in variable condition. In elevated areas such as Barkstand Point, vegetation clearance and ongoing processes have resulted in degraded grassland in areas that were probably once coastal woodland. Gorse infestations are an ongoing and significant threat, despite ten years of dedicated weed control work. Of additional concern is the presence of exotic pasture grasses such as sweet vernal, which make up a significant proportion of the overall vegetation cover. Tussock grasslands occur on the margin of saltmarsh in low lying areas of the reserve. These areas are in somewhat better condition, with less extensive infestations of weeds, and a greater dominance of native species. However, weeds remain a significant threat and weed control remains a priority.

Goals

- Maintain the extent of coastal grassland within 20% of baseline (ongoing)
- Increase the diversity of vertebrate fauna by 10% by 2020
- Increase the structural complexity of coastal grassland by 10% by 2020
- Increase the floristic diversity of coastal grassland by 10% by 2020

Seed-heads of a native Poa grass

Ecological indicator	Status 2014-15	Trend
Floristic diversity	4.3 species/site	Unknown
Structural complexity	4.8 strata/site	Unknown
Vertebrate fauna diversity	0.17 species per trap night	Unknown

Key findings

- Grassland diversity has been severely reduced by past management practices.
- Cover of exotic pasture species is high
- High macropod populations are over-grazing native vegetation
- No evidence of species that could be expected to occur in this habitat type, such as eastern quoll and eastern barred bandicoot

Recommendations

- Continue weed eradication efforts
- Survey for native annual herbs in November-December 2014 and identify ‘high-quality’ grassland areas
- Investigate the viability of grassland restoration with a focus on increasing floristic diversity and structural complexity

Community connection with the landscape

Long Point 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 gorse for over ten years. Each year, bird enthusiasts visit the reserve to participate in the annual Moulting Lagoon bird count on the neighbouring Ramsar listed wetlands, and a small but steady stream of students and visitors continue to appreciate the Reserves unique environments.

Goals

- People visit Long Point every year for recreation, research, education or volunteering

TLC volunteers and PWS staff participating in the annual Moulting Lagoon bird count

Community indicator	Current status	Trend
Volunteer days	35 volunteer days	Flat
Visitors	6 visitors	Flat
Research and education	1 project	Flat

Key findings

- The Reserve was used by observers on two occasions for the annual Moulting Lagoon bird count
- A team of ten volunteers worked on weed control
- A student from the University of Tasmania has concluded a project investigating saltmarsh invertebrates. A new PhD project is proposed.
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Recommendations

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

MANAGEMENT EFFECTIVENESS SUMMARY

Weed management

Gorse is widespread at Long Point. Almost 10 years of weed control works has made significant inroads into the problem, but significant areas remain. Weed mapping and control is continuing, and a revised weed action plan for the reserve is needed to ensure the weed works already underway on the reserve are built into works programs and undertaken effectively over the coming five year period.

Key objective(s)

All areas of gorse have received primary treatment by 2017

Gorse extent is reduced to < 5 hectares by 2020

Outcome 2015

Additional areas of gorse were treated

An ISV team killing gorse

Progress in 2014-15

- Weed spraying undertaken by Rod Bowerman at Barkstand Point (area burnt 2013) and Central Long Point (low sand dune near entrance gate). The work was funded by a grant from the Tasmanian Landcare Association
- Gorse burn conducted safely May 2015 in preparation for next year's spraying. Gorse was manually removed around wattle saplings to prevent scorching.
- A UTAS research project has been proposed that will investigate the impact of residual herbicide on native plant species.

Key recommendations for future management

- Update weed mapping
- Continue weed control works

Stock exclusion

Prior to acquisition by TLC, sheep had been grazed on Long Point Reserve and had caused significant degradation in grassland and woodland areas. Sheep are still grazed on the neighbouring property to the west (The Grange). A fence along the western boundary prevents stock from accessing the Reserve and is maintained with cooperation of the neighbouring landholders.

Key objective(s)

Access by neighbouring stock is prevented (ongoing)

Outcome 2015

No incursions of sheep have been detected or reported at Long Point since fences were upgraded in 2009.

New boundary fencing

Progress in 2014-15

- Boundary fences were checked and no repairs were required.

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 several opportunities for people to visit the Reserve and participate in a variety of volunteering, education and recreational activities.

International student volunteers controlling gorse

Progress in 2014-15

- TLC has continued to support a UTAS research project
- Regular communications have been maintained with the new owners of the Grange. A good relationship has been maintained with the property manager.
- TLC Staff continue to maintain a good working relationship with PWS Rangers at Freycinet NP and have cooperated on the annual Moulting Lagoon bird count.

Key recommendations for future management

- Continue to provide opportunities for people to connect with the Reserve.
- Continue to maintain relationships with neighbours

Feral animal control

Feral cats pose a significant threat to wildlife on the Reserve and in particular to nesting shore birds. Rabbits are in low numbers at present, but may effect the vegetation of grassland and woodland areas if numbers increase. Eradication of a feral animal species is usually impossible to achieve. However, variety of control methods can effectively reduce populations and consequent impacts to an acceptable level. Methods available including shooting, trapping, baiting and fencing. As animals are often widespread and mobile, it is always beneficial to work with neighbours to tackle populations at a regional level.

Key objective(s)

Investigate the feasibility of reducing feral animal numbers by 2016

Outcome 2015

Monitoring of cats and rabbits has commenced

A feral cat caught on camera

Progress in 2014-15

- Baseline data on rabbit and cat abundance has been collected
- Feral animal control (especially cats) has been identified as a priority

Key recommendations for future management

- Conduct feral animal management scoping paper

Fire management

Under the historic management regime, fire was used as a tool to encourage the growth of spring grass and suppress gorse. This practice has had significant impacts on vegetation structure and diversity. 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)

Outcome 2015

TLC Staff have gained important skills and experience in fire management and control

A controlled burn at Long Point

Progress in 2014-15

- An organisation wide fire risk assessment has been completed

Key recommendations for future management

- Continue to implement fire management strategy

Woodland restoration

At Long Point Reserve there has been a history of grazing, timber harvesting and frequent firing, which has resulted in degraded areas of coastal forest. Prior to European settlement, eucalypts would have formed the canopy of woodland areas. *Eucalyptus viminalis* is likely to have been the dominant species on sandy substrates such as Long Point, while *Eucalyptus amygdalina* is likely to have been dominant on dolerite substrates such as Barkstand Point. Following eradication of gorse in these areas, revegetation using local provenance tree and understorey shrub seedlings will be undertaken.

Key objective(s)

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

Outcome 2015

A review of woodland restoration was conducted and a revised strategy will be implemented in 2014-15.

Volunteers planting trees

Progress in 2014-15

- Tree guards have been maintained and removed wherever possible
- Priority areas for further revegetation have been identified
- Prof. Jamie Kirkpatrick identified an area of native grassland was inadvertently planted with trees and recommended their removal.

Key recommendations for future management

- Seek funding for further restoration plantings
- Remove trees from native grassland