



# Annual Reserve Report

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

Egg Islands Reserve was acquired by the TLC in 2007 and protects 136 hectares of black gum swamp forest, wetlands and saltmarsh in the Huon Estuary in southern Tasmania. The Reserve adjoins public land managed by the Parks and Wildlife Service. The management of the Reserve is guided by the *Joint Management Plan for the Egg Islands Reserve and Egg Islands Conservation Area 2009*. 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 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.


## Egg Islands Reserve Scorecard 2016-17

Monitoring			
Target	Indicator	Status 2016-17	Trend
Black gum swamp forest	Floristic diversity	9 species / site	Baseline data collected in 2015/6 and repeat data scheduled for 2020
	Structural complexity	4.2 strata / site	
	Canopy recruitment	1.7 cohorts / site	
	Vertebrate fauna diversity	6.7 species per site 16 species in total	
Wetlands and saltmarsh	Floristic diversity	6 species / site	
	Structural complexity	2.5 strata / site	
Management Effectiveness			
Strategy	Indicator	Status	Trend
Community engagement	# events at the Reserve	0 events	Flat
	# of volunteer activities /vol days	2 activities /44 vol days	Decrease
	# of research and education projects	1 research, 1 education	Increase
Weed management	Area of weeds	3 ha	Flat
	Density of weeds	<1%	Improving

Cover image: Egg Islands Reserve. Credit: Christine Corbett


## Monitoring Summary


<b>Black gum swamp forest</b>		<b>Status: Very Good</b>
<b>Goals:</b> Maintain the condition of Black Gum Swamp Forest		<b>Outcome: On Track</b>
<b>Target description:</b> Black gum swamp forest is a threatened community that has been extensively cleared since white settlement. The Egg Island stands are the largest remaining remnants in south-east Tasmania. The stands are important as foraging and potentially nesting habitat for the endangered swift parrot. Some areas of the property were cleared historically for agriculture. These areas are regenerating and are mostly dominated by native species, although Spanish heath is present in some areas.		 <p>Black gum swamp forest. Photo: M Taylor</p>
<b>Ecological indicator</b>	<b>Status in</b>	<b>Trend</b>
Floristic diversity	9 species / site	Unknown – due to reasses in 2020
Structural complexity	4.2 species / site	Unknown
Vegetation extent	56 hectares	Flat
Canopy recruitment	1.7 cohorts / site	Unknown
Vertebrate fauna diversity	6.7 species per site 16 species in total	Unknown
<b>Key findings</b> <ul style="list-style-type: none"> <li>Ten vegetation monitoring sites and 10 fauna cameras were installed in December 2015</li> <li>Preliminary assessment of the black gum forests show that they are in excellent condition</li> <li>There is an unusual and surprisingly diverse assemblage of fauna on Egg Islands. Monitoring detected 16 species, including long-nosed potoroo, eastern-barred bandicoot and southern brown bandicoot, with no cats detected</li> </ul>		
<b>Recommendations</b> <ul style="list-style-type: none"> <li>Repeat fauna monitoring before 2020 if possible to verify no cats.</li> <li>Resurvey in 2020.</li> <li>Continue collaborate with NRM, UTAS and FT on automatic acoustic detection capability for bittern and other conservation significant bird species</li> </ul>		

<b>Wetlands and saltmarsh</b>		<b>Status: Good</b>
<b>Goals:</b> Maintain the condition of Wetlands and Saltmarsh		<b>Outcome: On Track</b>
<b>Target description:</b> Wetlands and saltmarsh are highly productive environments that support a diverse range of fauna and provide habitat for large numbers of water birds. Wetlands also perform the key ecological function of maintaining good water quality in the Huon River by acting as a sink for nutrients and sediments Sea-level rise associated with climate change poses a significant threat to these low-lying wetlands.		
Wetland dominated by <i>Juncus</i> sp. Photo: TLC		
<b>Ecological indicator</b>	<b>Current status</b>	<b>Trend</b>
Floristic diversity	6 species / site	Unknown
Structural complexity	2.5 strata / site	Unknown
Extent	74 hectares	Flat
<b>Progress in 2016-17</b> <ul style="list-style-type: none"> <li>• Ten vegetation monitoring sites and 10 fauna cameras were installed in December 2015</li> <li>• Preliminary assessment of the saltmarsh and wetlands show that they are in excellent condition.</li> <li>• Neighbouring landholders were contacted in 2017 for bittern records with one neighbour reporting regular booming but no location or dates provided.</li> <li>• Progressing acoustic monitoring project with NRM South and UTAS</li> </ul>		
<b>Recommendations</b> <ul style="list-style-type: none"> <li>• Repeat monitoring survey in 2020</li> <li>• Install fauna cameras in two of the internal wetlands where vegetation is clearer</li> <li>• Undertake detailed mapping of wetland extent using remote sensing (possibly LIDAR)</li> <li>• Continue collaborate with NRM, UTAS and FT on automatic acoustic detection capability for bittern and other conservation significant bird species</li> </ul>		



## Management Effectiveness Summary

Weed management		
<b>Key objective(s)</b> Spanish heath, gorse and blackberry are functionally eradicated from the Reserve by 2017  A plan for controlling New Zealand flax will be implemented by 2018		<b>Status 2016-17</b> <b>On-track</b>
<b>Strategy description</b> The aim of this strategy is to eradicate existing infestations of weeds on the Reserve. Spanish heath occurs in areas that were previously cleared for agriculture, and New Zealand flax occurs along the banks of the Huon River. Weed mapping and control is continuing. Although weeds are not extensive or widespread, their eradication should be undertaken in a timely and effective manner to limit their spread.	 <p>Denna Kingdom assessing weeds. Photo: Steven Hall</p>	
Indicator	Current status	Trend
Area of weeds	3 ha	Flat
Density of weeds	1%	Improving
<b>Progress in 2016-17</b> <ul style="list-style-type: none"> <li>Volunteers spent five days in July and August undertaking weeding at the Reserve, including following up on trial methods for cut-and-paint of New Zealand flax. The entire Spanish heath infestation was searched and controlled twice, with the majority of plants found being immature. Immature gorse plants were also cut-and-painted near the old caravan site.</li> <li>Weed control is progressing as planned and will likely be ongoing for at least five more years to completely eradicate Spanish heath. Ongoing monitoring and control of gorse and blackberries will be necessary.</li> <li>Weed area remains approximately 3 ha but weed density has been reduced by 99% since 2007.</li> </ul>		
<b>Key recommendations</b> <ul style="list-style-type: none"> <li>Review the weed management strategy to focus on continuing follow-up control until the seed bank is exhausted.</li> <li>Continue the successful weed control program.</li> <li>Develop a control plan for New Zealand flax, with particular focus on treating plants growing on the river bank.</li> </ul>		

<b>Community engagement</b>		
<b>Key objective(s)</b> TLC provides opportunities for the community to benefit from the Reserve visit for recreation, education or volunteering		<b>Status 2016-17</b> <b>On-track</b>
<b>Strategy description</b> 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.	 <p>TLC maintains close links with the Living Boat Trust. Photo: TLC.</p>	
<b>Indicator</b>	<b>Current status</b>	<b>Trend</b>
# events at the Reserve	0 events	Flat
# of volunteer activities at the Reserve	2 reserve activities / 44 vol days	Flat
# of research and education projects	1 research, 1 education activity	Increase
<b>Progress in 2016-17</b> <ul style="list-style-type: none"> <li>TLC hosted two two-day volunteer trips to the Islands to control weeds – 22 volunteers</li> <li>TLC maintained its good relationship with the Living Boat Trust, which provided support by transporting volunteers to and from the islands.</li> <li>The Living Boat Trust is exploring options for boat-based tourism focussing on the Egg Islands.</li> <li>A group of artists, led by TLC supporter Patricia Martin, are developing an art exhibition inspired by Egg Islands.</li> <li>Projects to monitor swift parrots and Aust. Bitterns is continuing</li> </ul>		
<b>Key recommendations for future management</b> <ul style="list-style-type: none"> <li>Continue to provide opportunities for people to connect with the Reserve.</li> <li>Continue to maintain relationships with neighbours including PWS and the Living Boat Trust.</li> </ul>		