The Nut
State Reserve

Management
Plan

2003
The Nut
State Reserve

Management Plan

2003
THE NUT STATE RESERVE MANAGEMENT PLAN 2003

This Management Plan for The Nut State Reserve has been prepared in accordance with the requirements of Part 3 of the National Parks and Reserves Management Act 2002. Sections 1 to 7 comprise the statutory management plan. The appendices are included to provide additional information necessary for effective implementation of the plan.

Unless otherwise specified, this plan adopts the interpretation of terms given in Section 3 of the National Parks and Reserves Management Act 2002. The term “Minister” when used in the plan means the Minister administering the Act. The term “Director” refers to the Director of National Parks and Wildlife. The term "reserve" refers to The Nut State Reserve.

In accordance with Section 30 of the National Parks and Reserves Management Act 2002, the managing authority for the reserve shall carry out his or her duties in relation to the reserve for the purpose of giving effect to, and in accordance with the provisions of, this management plan. The Director of National Parks and Wildlife, is the managing authority for the reserve. Under the Partnership Agreement between the Circular Head Council and the State Government, it is proposed that the State and the Council will coordinate and cooperate in relation to the delivery of land management services for the reserve.

The plan may only be varied in accordance with procedures set out in Sections 19 and 20 of the National Parks and Reserves Management Act 2002 and, in any case, will be reviewed ten years after approval of the plan by the Governor.

A draft of this plan was released for public comment in accordance with statutory requirements from 3 March 2001 until 23 May 2001. This plan is a modified version of that draft, having been varied to take account of public representations, the views of the National Parks and Wildlife Advisory Council and the advice to the Minister provided by the Resource Planning and Development Commission in their report of October 2002.

APPROVAL
This management plan was approved by His Excellency, the Governor-in-Council, on 14 April 2003 and took effect on 2 July 2003, being seven days after publication of that approval in the Government Gazette.

ACKNOWLEDGEMENTS
This management plan was prepared by Leslie Frost, Planning Services, Parks and Wildlife Service. Many people have assisted in the preparation of this plan by providing information, comments and advice, in particular, local Parks and Wildlife staff, the Stanley Peninsula Land and Coastcare Group, members of the local Aboriginal community, officers of the Circular Head Council, local tourism operators and business people. Their time and efforts are gratefully acknowledged.

Published by Parks and Wildlife Service
Department of Tourism, Parks, Heritage and the Arts
GPO Box 44
Hobart, Tasmania, Australia 7001

ISBN: 0 9750599 2 0


©Crown in Right of State of Tasmania

Apart from fair dealing for the purposes of private study, research, criticism or review, as permitted under the Commonwealth Copyright Act 1968, no part may be reproduced for any means without written permission from the Department of Tourism, Parks, Heritage and the Arts, GPO Box 44, Hobart, Tasmania 7001.
Summary

The Nut State Reserve protects the most significant landform on the north-west coast of Tasmania. It is an integral part of the life and landscape of Stanley, the historic town lying at its foot. The Nut, or Circular Head as it is also known, is the symbol for Circular Head Municipality. It is the central landmark of the north-west coast, and central to the tourism industry of that part of Tasmania.

The reserve protects the nationally endangered straw daisy *Leucochrysum albicans* and provides an important breeding site for short-tailed shearwaters, peregrine falcons, Australian kestrels and little penguins. Although The Nut has serious weed problems, remnants of native vegetation remain and the Stanley Peninsula Land and Coastcare group has shown remarkable commitment to weed removal and the restoration of native vegetation and wildlife.

The reserve protects significant Aboriginal and historic heritage sites. The Nut and the Aboriginal sites are of deep significance to the Aboriginal community, both present and past. Historically, The Nut was part of the original Van Diemen’s Land Company land grant. It was also the site of the first microwave telecommunications experiments between Victoria and Tasmania and the first television transmission to Tasmania, bringing pictures of the 1956 Olympic games to viewers at the Green House.

The Nut State Reserve will be managed to protect and restore its natural and cultural values, and to provide for a range of tourism and recreational opportunities, including scenic viewing, walking, picnicking and nature study. The major management initiatives for the reserve are summarised below.

- The Parks and Wildlife Service, the Circular Head Council, local Tasmania Fire Service volunteers and Land and Coastcare volunteers will be encouraged to work together to develop and implement a plan for restoring and rehabilitating the vegetation of the reserve and to improve fire safety and accessibility for visitors and locals alike.

- Fire management and eradication or control of introduced weed species such as gorse and broom are the highest priorities for management (see Section 4.3).

- Management recommendations for the endangered straw daisy and the threatened snails will be implemented (see Appendices 2 and 5).

- The old PMG Lineyard will continue to be available for management purposes, but the site will be cleaned up and maintained in a neat and tidy condition, commensurate with its location at the entrance to the reserve.

- The fire radio repeater tower and shed will be relocated to improve the skyline of The Nut (see Section 3.3 and 4.1).

- As one of the 60 Great Short Walks in Tasmania, the circuit walk around the summit of The Nut will be upgraded to increase visitor enjoyment and safety and to arrest soil erosion.

- A Community Co-Management Group will be established to work with the Parks and Wildlife Service and the Circular Head Council in establishing management priorities, resolving issues and conflicts, and participating in volunteer programs.
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Overview</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Location, Reservation and Regional Context</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Natural and Cultural Values of the Reserve</td>
<td>1</td>
</tr>
<tr>
<td>2 Vision and Objectives</td>
<td>4</td>
</tr>
<tr>
<td>2.1 The Vision for the Reserve</td>
<td>4</td>
</tr>
<tr>
<td>2.2 Purposes and Objectives of State Reserves</td>
<td>4</td>
</tr>
<tr>
<td>2.3 Specific Reserve Objectives</td>
<td>5</td>
</tr>
<tr>
<td>2.4 Management Zones</td>
<td>5</td>
</tr>
<tr>
<td>3 Conservation</td>
<td>8</td>
</tr>
<tr>
<td>3.1 Topography and Climate</td>
<td>9</td>
</tr>
<tr>
<td>3.2 Geoheritage</td>
<td>10</td>
</tr>
<tr>
<td>3.3 Natural Landscape</td>
<td>13</td>
</tr>
<tr>
<td>3.4 The Coastal Zone</td>
<td>13</td>
</tr>
<tr>
<td>3.5 Water Quality</td>
<td>15</td>
</tr>
<tr>
<td>3.6 Flora</td>
<td>17</td>
</tr>
<tr>
<td>3.7 Fauna</td>
<td>19</td>
</tr>
<tr>
<td>3.7.1 Mammals</td>
<td>19</td>
</tr>
<tr>
<td>3.7.2 Birds</td>
<td>20</td>
</tr>
<tr>
<td>3.7.3 Reptiles</td>
<td>21</td>
</tr>
<tr>
<td>3.8 Cultural Heritage</td>
<td>21</td>
</tr>
<tr>
<td>3.8.1 Aboriginal Heritage</td>
<td>25</td>
</tr>
<tr>
<td>3.8.2 Historic Heritage</td>
<td>27</td>
</tr>
<tr>
<td>3.8.3 Cultural Landscape</td>
<td>29</td>
</tr>
<tr>
<td>4 Protection</td>
<td>27</td>
</tr>
<tr>
<td>4.1 Fire Management</td>
<td>28</td>
</tr>
<tr>
<td>4.2 Introduced Fauna</td>
<td>28</td>
</tr>
<tr>
<td>4.3 Weed Management and Revegetation</td>
<td>29</td>
</tr>
<tr>
<td>4.4 Soil Conservation and Erosion Control</td>
<td>29</td>
</tr>
<tr>
<td>4.5 Managing Visitor Impacts</td>
<td>30</td>
</tr>
<tr>
<td>4.6 Managing Development</td>
<td>30</td>
</tr>
<tr>
<td>5 Tourism, Recreation and Visitor Management</td>
<td>31</td>
</tr>
<tr>
<td>5.1 Understanding the Reserve Visit</td>
<td>31</td>
</tr>
<tr>
<td>5.2 Promoting the Reserve</td>
<td>32</td>
</tr>
<tr>
<td>5.3 Interpretation and Education</td>
<td>32</td>
</tr>
<tr>
<td>5.4 Access to the Reserve</td>
<td>33</td>
</tr>
<tr>
<td>5.4.1 Air Access</td>
<td>33</td>
</tr>
<tr>
<td>5.4.2 Vehicular Access</td>
<td>33</td>
</tr>
<tr>
<td>5.4.3 Chairlift Access</td>
<td>34</td>
</tr>
<tr>
<td>5.4.4 Walking Access</td>
<td>34</td>
</tr>
<tr>
<td>5.4.5 Bicycle Access</td>
<td>36</td>
</tr>
<tr>
<td>5.5 Facilities and Services</td>
<td>37</td>
</tr>
<tr>
<td>5.5.1 Facilities and Services in the Visitor Services Zone</td>
<td>37</td>
</tr>
<tr>
<td>5.5.2 Facilities and Services in the Recreation Zone</td>
<td>38</td>
</tr>
<tr>
<td>5.5.3 Facilities and Services in the Natural Zone</td>
<td>39</td>
</tr>
<tr>
<td>5.5.4 Assessing New Development Proposals</td>
<td>39</td>
</tr>
<tr>
<td>6 Involving The Community</td>
<td>39</td>
</tr>
<tr>
<td>6.1 Community Involvement and Support</td>
<td>39</td>
</tr>
<tr>
<td>6.2 Working with Neighbours</td>
<td>40</td>
</tr>
<tr>
<td>7 Other Issues</td>
<td>40</td>
</tr>
<tr>
<td>7.1 Boundaries</td>
<td>40</td>
</tr>
<tr>
<td>7.2 Leases, Licences and Authorities</td>
<td>40</td>
</tr>
<tr>
<td>7.3 Research</td>
<td>40</td>
</tr>
<tr>
<td>7.4 Administration</td>
<td>40</td>
</tr>
<tr>
<td>7.4.1 Implementation</td>
<td>40</td>
</tr>
<tr>
<td>7.4.2 Search and Rescue, First-Aid</td>
<td>40</td>
</tr>
<tr>
<td>7.4.3 Enforcement</td>
<td>40</td>
</tr>
<tr>
<td>7.5 Monitoring and Evaluation</td>
<td>40</td>
</tr>
</tbody>
</table>
The Nut State Reserve Management Plan 2003

Glossary ......................................................................................................................................................... 44
References ..................................................................................................................................................... 45
Appendix 1 Flora of The Nut State Reserve ............................................................................................... 47
Appendix 2 Management of the Straw Daisy ............................................................................................ 50
Appendix 3 Known Fauna of The Nut State Reserve .................................................................................. 51
Appendix 4 Wildlife Viewing Guidelines .................................................................................................. 53
Appendix 5 Management of the Stanley Snail ............................................................................................ 54
Appendix 6 Tasmanian Historic Places Inventory Reports ......................................................................... 57
Appendix 7 Gorse Spider Mite ..................................................................................................................... 61
Appendix 8 Introduced Plants Policy .......................................................................................................... 63
Appendix 9 Weed Management Recommendations ................................................................................... 67
Appendix 10 Draft Site Planning Guidelines .............................................................................................. 70
Appendix 11 National Estate Listing Statement ........................................................................................ 72
Appendix 12 Implementation Priorities ..................................................................................................... 74
Appendix 13 Draft Terms of Reference .................................................................................................... 77

Maps
Map 1 Location, Access, Boundaries and Tenure ...................................................................................... 3
Map 2 Management Zones .............................................................................................................................. 6
Map 3 Revegetation and Weed Management .............................................................................................. 23

Figures
Figure 1 The Nut (circa 1830) ................................................................................................................... 11

Tables
Table 1 Management Zones .......................................................................................................................... 7
## 1 Overview

### 1.1 Location, Reservation and Regional Context

The Nut State Reserve encompasses much of the distinctive headland known as Circular Head on the north-west coast of Tasmania, approximately 80 kilometres west of Burnie (see Map 1). Adjoining the historic town of Stanley on the Stanley Peninsula, The Nut rises to 143 metres and is almost completely ringed by sheer cliffs falling to the sea.

The reserve was proclaimed on 18 November 1980 (Statutory Rule 263), becoming effective on 3 December 1980, for its value as a scenic landmark. The reserve is 59.28 hectares in area and does not include two disused quarry sites on the northern side and the south-eastern side behind the Stanley wharf area. The exact boundaries of the reserve are shown on Plan LM 162, registered in the Central Plan Office of the Department of Primary Industries, Water and Environment.

The reserve is located in the Municipality of Circular Head. The Nut is a focal point for the regional tourism industry of the north-west coast. It complements other destinations in the region such as Rocky Cape National Park, the Arthur Pieman Conservation Area and historic sites in Stanley itself, such as Highfield House, the Van Diemen’s Land Company Store, the Stanley Schoolhouse and Lyons Cottage.

### 1.2 Natural and Cultural Values of the Reserve

The Nut is the tourism icon for the north-west region and one of the most well known landforms in Tasmania. While its importance in promoting nature-based regional tourism cannot be understated, the reserve’s links to the historic town of Stanley and the history of the north-west give it added value (see Section 3.8). Along with the reserve, many of the buildings as well as the entire town of Stanley are listed on the register of the National Estate.

The Nut is also classified as a State Geological Monument (Eastoe 1979), by the Geological Society of Australia. It is listed on the Tasmanian Geoconservation Database, held at the Department of Primary Industries, Water and Environment (DPIWE), as a Site of Geoconservation Significance. The geology of the reserve is of great scientific interest as it is still unclear whether it is the solidified lava neck of a volcano or a slab of lava at the top of a feeder pipe-like intrusion, or some combination of both.

Although gorse and other exotic plant species dominate the vegetation of the reserve, it still has high conservation value as one of the few native vegetation remnants on lowland basaltic soils in the north-west. Some of the slopes of The Nut are relatively gorse-free, and remnant native plant communities remain intact. The endangered straw daisy occurs on the cliff edges.

The reserve is valuable as a breeding site for thousands of short-tailed shearwaters. Australian kestrels, peregrine falcons, and little penguins breed in the reserve, and the endangered orange-bellied parrot uses it as a staging point during its migration between Tasmania and Victoria each year. Two threatened snail species occur in the reserve.

Aboriginal sites and historical use of the reserve form an important cultural resource and can provide source material for educational and interpretive programs.

The reserve is important for recreational use by locals and visitors alike for walking, enjoying scenic views of the Stanley Peninsula and north-west coastline, nature study and birdwatching. The chairlift provides easy access for most people, while the steep walking track to the top provides a bit of a challenge. The combination of spectacular scenery, wildlife and history provide an excellent opportunity for education and interpretation.

The reserve also has educational value in showing what can be achieved through volunteer effort. The local Land and Coastcare group, Aboriginal community and primary school have achieved remarkable results over the last decade in gorse and weed control and revegetation with local native species.

In summary, the natural and cultural values of the reserve are:

- its value as a landscape, landmark and tourism icon for the north-west;
- its historic connection with Stanley, Highfield House and Woolnorth;
• as a geological feature of the region and Tasmania;

• its ongoing importance to the local Aboriginal community;

• its value in conserving a remnant of native vegetation on lowland basaltic soils;

• as a breeding site for short-tailed shearwaters, kestrels, little penguins and peregrine falcons;

• as habitat for several threatened species; and

• its recreational value for walking, scenic viewing, nature study and bird watching.
2 Vision and Objectives

2.1 The Vision for the Reserve

Developing a vision for the reserve allows people to picture how the reserve will be in the future and to provide direction to management. The following vision statements provide goals for sustaining the values of the reserve into the future by guiding development and management practices.

In the future, the reserve contains a healthy and natural biodiversity, with viable populations of local native species and with no significant adverse impact from human activities.

Gorse and other woody weeds are eradicated or under control. Threatened flora and fauna species are secure in the reserve. Rehabilitation and revegetation programs are progressing well, restoring some forested areas on the lower slopes and native shrubs and grasses on the summit to provide shelter for wildlife.

The Aboriginal and historic heritage of the reserve has been identified, protected and interpreted for visitors and the local community in consultation with the Aboriginal community and historic heritage specialists.

Visitors to the reserve are able to enjoy quiet and peaceful surroundings with stunning coastal and village views. Opportunities to learn about the natural and cultural values of the reserve are provided by high quality interpretation, facilities and tourism activities.

Recreational and educational activities allow the local community and visitors to contribute to ongoing rehabilitation and revegetation of the reserve.

Visitors are able to pursue recreational activities that are in keeping with the character of the reserve and that do not disturb or detract from the experience of other reserve users.

Recreational and visitor facilities and services are well designed and in keeping with the historical atmosphere of Stanley. The skyline of The Nut appears natural and unmarked by towers or buildings from various viewpoints in the district.

2.2 Purposes and Objectives of State Reserves

State Reserves are a class of reserved land under the Nature Conservation Act 2002. They are areas of land containing any of the following:

- significant natural landscapes;
- natural features;
- sites, objects or places of significance to Aboriginal people.

The purposes of reservation of State Reserves, as set out in Schedule 1 of the Nature Conservation Act 2002, are the protection and maintenance of any one or more of the following: (a) the natural and cultural values of the area of land; (b) sites, objects or places of significance to Aboriginal people contained in that area of land; and/or (c) use of the area of land by Aboriginal people while providing for ecologically sustainable recreation consistent with conserving any of the things referred to above. The Nut State Reserve is reserved for all of these purposes.

The objectives of State Reserves are set out in Schedule 1 of the National Parks and Reserves Management Act 2002. All of the general objectives for State Reserves set out in the Act apply to The Nut State Reserve, with the possible exception of the water quality objective as there are no surface water bodies located in the reserve. Because of the complex interrelationship of factors to be considered in managing the reserve, the reasons these objectives apply and the manner in which the objectives will be achieved are dealt with in a number of sections of the management plan. The sections of the management plan that primarily deal with each management objective in the Act are shown in brackets below. The management objectives of State Reserves are:

- to conserve natural biological diversity (Sections 3.6 and 3.7);
- to conserve geological diversity (Section 3.2);
- to preserve the quality of water and protect catchments (Sections 3.4 and 3.5);
- to conserve sites or areas of cultural significance (Sections 3.3 and 3.8);
- to encourage cooperative management programs with Aboriginal people in areas of significance to them in a manner consistent...
The Nut State Reserve Management Plan 2003

with the purposes of reservation and the other management objectives (Sections 3.8.1 and 5.3);

- to encourage education based on the purposes of reservation and the natural or cultural values of the State reserve, or both (Section 5.3);

- to encourage research, particularly that which furthers the purpose of reservation (Section 7.3);

- to protect the State Reserve against, and rehabilitate the State Reserve following, adverse impacts such as those of fire, introduced species, diseases and soil erosion on the State reserve’s natural and cultural values and on assets within and adjacent to the State Reserve (Sections 4.1, 4.2, 4.3 and 4.4);

- to encourage tourism, recreational use and enjoyment consistent with the conservation of the State reserve’s natural and cultural values (Section 5).

### 2.3 Specific Reserve Objectives

In addition to the general management objectives listed above, specific reserve objectives will apply to The Nut State Reserve to achieve the long term vision. These are intended to underpin sustainable recreational and tourism use and support long term rehabilitation and revegetation objectives:

- to provide tourism, education and recreation opportunities that complement those found in the region (Section 5);

- to ensure cooperative fire management of the reserve is undertaken utilising the skills and knowledge of the local community, local fire service volunteers and the local Land and Coastcare volunteers (Section 4.1);

- to encourage and support ongoing weed control and revegetation efforts by local volunteers (Sections 4.3 and 6);

- to rehabilitate and restore the cultural landscape of the reserve when viewed from a distance (Sections 3.8.3 and 4.3); and

- to encourage the recovery of native flora and fauna (Sections 3.6, 3.7, 4.2 and 4.3).

### 2.4 Management Zones

The reserve has been zoned to ensure appropriate management, development and use in different parts of the reserve.

**Policies**

- Three management zones apply to the reserve: the Natural Zone, the Recreation Zone and the Visitor Services Zone. Map 2 shows the locations of these zones in the reserve.

- If any development consistent with, but not already explicitly designated in this management plan is proposed, a site plan will be prepared for the Visitor Services Zone in accordance with the prescriptions of Sections 4.6 and 5.5.1.

- Tourism and recreation facilities and services in each zone will be limited to those provided for in Section 5 of this management plan.

- Pursuant to Section 37 of the National Parks and Reserves Management Act 2002, Restricted Areas shown on map 2 are declared by virtue of this management plan to protect breeding birds and threatened species (see Section 3.7 and 3.8). Except for management purposes approved by the Director, pursuant to Regulation 11 of the National Parks and Reserved Land Regulations 1999, a person must not enter or remain in a Restricted Area without written authority from the Director.
### Table 1  Management Zones (see Map 2)

<table>
<thead>
<tr>
<th>ZONE &amp; LOCATION</th>
<th>VALUES AND USE</th>
<th>GENERAL AIMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitor Services Zone</td>
<td>High use areas with visitor services and facilities provided according to level of use. Management inputs and presence are high to protect natural, historic and cultural values, recreation and tourism. General public access by foot and 2WD vehicle.</td>
<td>To provide visitor services and facilities where visitation is highest and most accessible, consistent with reserve objectives. To maintain as far as possible, a natural setting and cultural integrity and to minimise impacts of facilities and visitor use.</td>
</tr>
<tr>
<td>Recreation Zone</td>
<td>Important natural values and scope for recreational use by suitably equipped people. Areas that are suitable for relatively high levels of day use due to their location and proximity to road and walking track access.</td>
<td>To provide for sustainable recreational activities and small-scale facilities without significant impact on natural processes.</td>
</tr>
<tr>
<td>Natural Zone</td>
<td>Important natural values due to relatively low human impact. Important scenic and landscape values.</td>
<td>To conserve natural integrity and protect, maintain and monitor the diversity of plant and animal species and communities. To conserve Aboriginal heritage values. To maintain the character of naturalness, tranquillity and isolation.</td>
</tr>
<tr>
<td>Restricted Areas</td>
<td>Important fauna and flora habitat for breeding birds and threatened species, which must be protected from human impact.</td>
<td>To conserve, protect, maintain and monitor threatened species and important breeding habitat, and to protect burrows from collapse caused by trampling.</td>
</tr>
</tbody>
</table>
3 Conservation

3.1 Topography and Climate

The Nut, also known as Circular Head, is an elliptical basaltic headland on the Stanley Peninsula, which rises from sea level to a height of 143 metres. The Nut appears to be flat on top from a distance, although there is some variation. It is about 500 metres diameter at the top and 900 metres diameter at sea level, ringed by sheer cliffs to the sea on three sides and drops steeply to the town of Stanley on its southern side. Long sandy beaches extend to the north and west of The Nut.

The climate and weather of the reserve and the Stanley Peninsula are maritime temperate, dominated by the prevailing west north-westerly winds and currents flowing through Bass Strait. The average rainfall is 1110 mm per annum. The mean daily maximum and minimum temperatures in January are 21 °C and 11 °C, respectively. The mean daily maximum and minimum temperatures in July are 12.8 °C and 4.5 °C, respectively.

3.2 Geoheritage

The Nut consists of a thick layer of coarse-grained basalt rock overlying softer sediments (Eastoe 1979). Various theories have been advanced to explain the origin of the basalt mass. Like nearby Table Cape, it appears to be the vertical pipelike intrusion of a volcanic vent. Lava forced its way up to the surface and flowed onto the surrounding countryside about 12.5 million years ago during the middle Miocene of the Tertiary. Marine erosion of surrounding sediments has left the characteristic steep sides of the original pipelike body in an otherwise flat landscape, creating the well-known landmark.

The soils of the reserve are a red or red-brown clay loam of basaltic origin (Richley 1978). They are not particularly fertile, but their depth and other physical properties make them ideal for cultivation and pasture production. The soil type is classified as moderately susceptible to both sheet erosion and mass movement due to water saturation. Sheet erosion is caused by both overgrazing and wind exposure. Rockfall and landslips have occurred on the lower slopes of The Nut. Any works in the reserve, which could affect groundwater flow or drainage on the Stanley side of The Nut should be carefully assessed for effects on ground stability (Matthews 1975).

Objectives - Geodiversity

- protect, maintain and monitor geodiversity.
- Maintain the natural rates and magnitudes of change in earth processes.
- Minimise harmful impacts on geoconservation values.

Policies

- Potential adverse impacts on geodiversity and earth processes will be assessed when planning any development or action, including land rehabilitation and stabilisation (see Section 4.6).
- Management practices and development will avoid or otherwise minimise impacts on the integrity of The Nut.

Actions

- Monitor impacts on geodiversity resulting from developments, rehabilitation or stabilisation works.

3.3 Natural Landscape

Although the natural landscape of The Nut State Reserve has been greatly altered since European settlement, it retains great aesthetic appeal as a landmark and symbol of the north-west coast. Its National Estate listing is due to its significance as the most prominent and dramatic landmark on the northern coast of Tasmania (Australian Heritage Commission 1981). Any changes to the landscape, particularly the skyline, must be carefully considered. The fire tower and shed are apparent on the skyline from Stanley and along the Stanley Peninsula approaches. The chairlift towers and terminals are not as obvious from a distance. Some concern has been expressed by local residents and tourism operators that reforestation of The Nut would spoil its scenic value for visitors.

Objectives – Natural Landscape

- Protect, maintain and monitor the National Estate values of the natural landscape.
- Protect the scenic value of the skyline of the reserve.
Policies

- No further structures, towers or buildings will be built on the skyline of the reserve.
- Any infrastructure necessary for management will be located adjacent to the chairlift terminal or sited out of the viewfields of visitors using the walking track on top of The Nut.
- Revegetation and rehabilitation programs will take into account the value of the cultural landscape to the local community and tourism industry (see Section 3.8.3).

Actions

- Identify and protect the significant natural and cultural landscape features and attributes that contribute to the landmark and scenic value of the reserve (see Section 3.8.3).
- Assess the visual impact of proposed developments on natural and cultural landscape values prior to approval of such developments.
- The Tasmanian Fire Service will remove or relocate the fire radio tower and shed to a site adjacent to the chairlift terminal (see Section 4.1) and then rehabilitate and revegetate the site with appropriate local native species.
- Revegetation programs will take into account the cultural landscape values of the skyline (see Section 3.8.3).

3.4 The Coastal Zone

The management objectives, policies and actions in this plan for The Nut State Reserve give effect to and are consistent with the principles of the Tasmanian State Coastal Policy 1996. The three main principles of the policy are:

- natural and cultural values of the coast shall be protected;
- the coast shall be used and developed in a sustainable manner; and
- integrated management and protection of the coastal zone is a shared responsibility.

These principles recognise:

- the importance of maintaining representative or significant natural ecosystems and sites of biological importance, and the biodiversity of Tasmania's indigenous coastal flora and fauna;
- the economic and social values of tourism and recreation in the coastal zone;
- the importance of public access to and along the coast consistent with protection of natural coastal values, systems and processes;
- that management responsibility for the coast is shared between communities, local government, State government and the Commonwealth;
- that the State government has primary management responsibility; and
- that communities have an important role to play in coastal management through participation in decision-making, input to policies and plans and direct management.

Action

- Liaise with other relevant agencies and neighbouring private landholders to ensure implementation of the policy.

3.5 Water Quality

The State Policy on Water Quality Management 1997 requires that protected environmental values and water quality objectives are set for all waterbodies around the State. Protected environmental values are the identified, established values and uses of a waterbody and include one or more of the following categories: protected aquatic ecosystems (pristine or modified), recreational water quality and aesthetics, raw water for town drinking water supply or designated private supply, agricultural use and industrial water supply.

The north-eastern boundary of The Nut State Reserve extends to low water mark. This management plan proposes that the following protected environmental values be assigned to the marine waters of the reserve:

A. Protection of aquatic ecosystems:

That is, as a minimum, the water quality shall be managed to provide water of a physical and chemical nature to support a modified but healthy aquatic ecosystem from which edible fish crustacea and shellfish could be harvested.
B. Protection of recreational water quality and aesthetics:

As a minimum, the water quality shall be managed to provide water of a physical and chemical nature that enables people to safely engage in swimming, diving and snorkeling (primary contact) and boating and paddling (secondary contact) in aesthetically pleasing waters.

**Objective – Water Quality**

- The objective of water quality management is to maintain or enhance water quality.

**Policy**

- Water quality management will protect all of the values and uses identified above.

**Action**

- Respond to pollution of the marine waters of the reserve by oil and other hazardous/noxious substances as set out in the Tasmanian Marine Oil Pollution Plan (1997).

### 3.6 Flora

The Nut State Reserve has conservation significance as one of the few vegetation remnants on basaltic soils in the lowlands of north-west Tasmania. A list of flora species is given in Appendix 1. Though Willis (1966) established that there were at least 100 species of native plants, the reserve is dominated by plants, which are not native to The Nut or to Tasmania. This is the result of 170 years of native vegetation clearance for timber and pasture, from grazing, rabbits, the spread of aggressive weed species and fire. Gorse *Ulex europaeus* and other woody weeds now cover approximately 30% of the total area of the reserve (see Section 4.3).

The Nut is virtually treeless except for remnant coastal white gum *Eucalyptus viminalis* woodland which survives on steep scarps and cliff ledges, and trees planted in the 1980’s and in the last five years by the Stanley Peninsula Land and Coastcare Group. Early descriptions of The Nut describe a forested landscape (Figure 1), though the dominant species are unknown. As late as the 1870s, the summit of The Nut still had several acres of timber (Whitworth 1879 described in Willis 1965). Many of the houses in Stanley are constructed from local timbers, including blackwood *Acacia melanoxylon*. Willis postulates that the
Figure 1

A view of Circular Head from Highfield, based on a pencil sketch (c. 1829) by the company surgeon, Dr. J.H. Hutchinson, is reproduced by courtesy of the Archives Office of Tasmania.

The surgeon died in 1839, at the early age of 39, from consumption. His headstone may be seen in the Stanley cemetery.
summit area may have *E. viminalis* woodland. The cultural landscape values of The Nut and its appearance are discussed in Section 3.8.3.

The summit is now tussock grassland, covered in tussock grass *Poa labillardieri* with a high degree of invasion by exotic species, including Yorkshire fog-grass *Holcus lanatus* and thistles *Cirsium* and *Carduus* species and *Silybum marianum*. The slopes and cliffs of The Nut are vegetated in kangaroo grass *Themeda triandra* tussock grassland and sagg *Lomandra longifolia* sedgeland, peas such as running postman *Kennedia prostrata* and native soybean *Glycine clandestina*. These plant communities are an important seed source for rehabilitating areas where weeds have been removed. Some of the slopes above Stanley are heavily invaded by gorse, while the native vegetation on most of the seaward slopes is intact. Weed management is dealt with in Section 4.2.

**The Straw Daisy**

An outlying population of the endangered straw daisy *Leucochrysum albicans* occurs on cliff edges on the northern and eastern faces of the reserve. This population is very important as it exhibits different growth characteristics and morphology to other populations in Tasmania. The species is listed as endangered on the Commonwealth *Endangered Species Protection Act 1992*, and endangered on the Tasmanian *Threatened Species Protection Act 1995*. The straw daisy appears to require freedom from competition by native grasses, so cultural activity such as grazing promotes its establishment and survival (Gilfedder and Kirkpatrick 1994). Exclusion of fire and grazing leads to increased grass growth and the invasion of woody shrubs, which results in the decline and local extinction of the straw daisy. Onion weed is emerging as a threat to straw daisies near the Western lookout. Botanists of the Nature Conservation Branch, DPIWE have prepared recommendations for management of the straw daisy. These are given in Appendix 2. A permit is required from the Director of National Parks and Wildlife to collect, possess or disturb this species, including seed collection.

**Objectives - Flora**

- Protect, maintain and monitor natural flora diversity.
- Protect, maintain and monitor threatened flora species.
- Protect, maintain and monitor plant communities of conservation significance.
- Minimise harmful impacts on the indigenous flora.

**Policies**

The following areas will be given high flora conservation priority:

- cliff edges where the straw daisy survives;
- areas where remnant native vegetation communities survive;
- areas replanted with species of local provenance; and
- any areas containing threatened flora species or communities of conservation significance.

- Adverse impacts in high flora conservation priority areas will be avoided or limited to those, which are localised, and of minimal impact.
- Only local provenance of species native to the reserve will be used in rehabilitation works unless written approval by the Director is given for alternatives.
- Fire management in high flora conservation priority areas, including fuel reduction burning and habitat management burning, will conform with this management plan (see Section 4.1).
- All practical efforts will be made, consistent with the available resources, prevailing Fire Danger Index, fire intensity and fire crew safety, to exclude unwanted wildfire from or restrict its spread in high flora conservation priority areas (see Section 4.1).

**Actions**

- District management staff will consult specialist botanists of the Parks and Wildlife Service and the Stanley Peninsula Land and Coastcare Group to prepare a map showing areas of high flora conservation priority based on current knowledge of threatened species locations and revegetation works.
- Use and continually update the high flora conservation priority map for planning all vegetation and habitat management programs.
• Prepare programs for ecological management burning, setting out the fire frequencies necessary to maintain viable populations of species and communities of high conservation value.

• Prepare and/or implement management programs for the straw daisy using the management recommendations in Appendix 2. Determine management action required to control onion weed, particularly where straw daisies occur.

• Programs for patch burning of gorse or other weed infested areas will take into account native flora conservation, as well as conservation of habitat for the threatened snails (see Appendix 5) and other fauna species of importance identified in the next section.

• Revegetation with local native species following weed removal should be undertaken concurrently and in a mosaic pattern to allow birds and animals such as eastern barred bandicoot areas of cover for resting and breeding.

• Revegetation programs will accord with the actions prescribed in Section 3.8.3.

3.7 Fauna

A list of fauna known to occur in the reserve is included in Appendix 3. Comprehensive fauna surveys have not been carried out for the reserve. Habitat changes resulting from clearing and grazing since European colonisation have no doubt altered the species composition of the reserve. However, rehabilitation and revegetation work undertaken over the last decade will encourage more wildlife, especially birds.

3.7.1 Mammals

Native mammals seen on the summit and the slopes of the reserve include the Tasmanian pademelon *Thylogale billardierii*, the Tasmanian devil *Sarcophilus harrisii*, the eastern barred bandicoot *Perameles gunnii*, the brushtail possum *Trichosurus vulpecula fuliginosus* and the ringtail possum *Pseudocheirus peregrinus viverrinus*.

The introduced rabbit *Oryctolagus cuniculus* is common in parts of the Stanley Peninsula and occurs in considerable numbers in the reserve. Feral cats are common in the reserve.

3.7.2 Birds

One of the most outstanding features of the reserve is its use by migratory birds. Several colonies of the short-tailed shearwater *Puffinus tenuirostris*, also known as the Tasmanian muttonbird, occur on the seaward sides of the summit. In 1994, a survey located over 13,000 burrows in the reserve. Over 10,000 burrows are located in the two colonies visible from the lookout shown on Map 2 (I. Skira, pers com). Poaching of shearwaters from these colonies occurs occasionally, resulting in damage to their burrows. This activity is incompatible with reserve objectives. However, in the north-west, Green Point, Hunter and Three Hummock Islands are legally available for muttonbirding.

The Nut is also important as a first landing and staging point for several species, including the endangered orange-bellied parrot *Neophema chrysogaster* during its migration from Victoria to Tasmania to breed in the south-west of the State. Other species known to stop at The Nut include the blue-winged parrot *Neophema chrysoptoma*, the grey fantail *Rhipidura fuliginosa albiscapa*, the silvereye *Zosterops lateralis lateralis*, the marsh harrier *Circus aeruginosus gouldii* (which is known to nest on The Nut), the Horsfields bronze-cuckoo *Chrysococcyx basalais* and the shining bronze-cuckoo *Chrysococcyx lucidus plagosus*. The only Tasmanian sighting of a black-eared cuckoo *Chrysococcyx osculans* was recorded at The Nut (N. Brothers, pers com).

The Australian kestrel *Falco cenchroides cenchroides* has traditionally bred on the westward face of The Nut under the Stanley lookout, one or two pairs of only ten or so pairs on mainland Tasmania. Protection of their nesting sites from disturbance by rock climbers will be necessary September to December inclusive (N. Mooney, pers com).

The peregrine falcon *Falco peregrinus macropus* also breeds on The Nut on the northern and eastern cliffs, an area not traditionally used by recreational climbers.

Little penguins *Eudyptula minor*, also known as fairy penguins, nest on the lower scree slopes on the seaward side of the reserve. They are highly vulnerable to attack by cats and dogs, particularly when coming ashore or going to sea from their burrows. They are reasonably safe once they are in their burrows. A local tourism operator has constructed a number of penguin ‘houses’ from rock along the northern shore from the cemetery on the former quarry reserve (now
unallocated Crown land), outside of the State reserve (see Map 1). The ‘houses’ appear to be well used by penguins. Wildlife viewing guidelines for ecotourism operators and the public are provided in Appendix 4.

3.7.3 Reptiles

All three species of Tasmanian land snakes have been recorded in the reserve. These are the tiger snake *Notechis ater*, the copperhead *Austrelaps superbus*, and the white-lipped whipsnake *Drysdalia coronoides*.

There are a great variety of skinks and lizards in the reserve. A survey may find new varieties or even species.

3.7.4 Snails

To date, only three populations of the tiny Stanley snail *Miselaoma weldii* have been located on The Nut. The largest population is found on the north-eastern and the northern slopes of The Nut. Another population is located in the ivy on the southern cliff face of The Nut, clearly visible from Stanley.

The Stanley snail is listed as vulnerable under Tasmania’s *Threatened Species Protection Act 1995*. Adult shells are up to 1.8 mm wide and 1.3 mm high with a raised spire of 5 or 6 whorls. It occurs in a wide range of vegetation types where leaf litter accumulates and seems to be capable of surviving some weed intrusion. Key threats include extensive weed invasion resulting in habitat loss, uncontrolled fire, clearing of native vegetation, including stock grazing, and disturbance to rock piles or cliff faces which provide shelter. Appropriate habitat management for the Stanley snail is given in Appendix 5.

Another threatened snail species, the keeled snail (*Tasmaphena lamproides*) is also found on The Nut. The keeled snail is listed as Rare in the schedule of the Tasmanian *Threatened Species Protection Act 1995*. The Nut population, although small and possibly not viable, has extra importance because it is the easternmost surviving population, the type locality of the species, and in an unusual habitat type for the snail. The Nut colony occurs on the north-eastern face of The Nut in rockpiles and in low scrubby woodland. Management practices recommended for the Stanley snail are also suitable for the keeled snail.

**Objectives - Fauna**

- Protect, maintain and monitor all indigenous fauna species and their habitat.
- Protect, maintain and monitor the diversity of indigenous fauna and habitat.
- Minimise, and where possible eradicate, harmful impacts on indigenous fauna and habitats.
- Provide opportunities for visitors to encounter wildlife.

**Policies**

- Special management measures and protection will be given to the habitat of the threatened snail species and the nesting sites of the Australian kestrel, the peregrine falcon and the short-tailed shearwater.
- The western face of the reserve below the Stanley lookout is **declared a Restricted Area by virtue of this management plan (see Section 2.4)** to protect breeding Australian kestrels from disturbance by recreational rock climbers.
- The eastern (seaward) face of the reserve below the shearwater lookout is declared a **Restricted Area by virtue of this management plan (see Section 2.4)** to protect breeding shearwaters and peregrine falcons from disturbance by visitors and tourism operators.
- All practical efforts will be made to prevent fire and other adverse impacts on breeding of indigenous species.
- Weed removal and revegetation will be carried out in a mosaic pattern to enable fauna populations to remain in an area until the new native vegetation takes hold and provides adequate cover.
- Slashing, ecological burning and spraying for weed control will be undertaken mostly between April and August to minimise potential impacts on breeding birds and other fauna.
- Information will be provided to Land and Coastcare volunteers and to visitors on minimising adverse impacts of weed control programs and visitor use on breeding birds and the Stanley snail.
**Actions**

- Prepare programs of ecological management, setting out the slashing, spraying and fire frequency necessary to control weeds and improve habitat for indigenous fauna and to attract other native wildlife to the reserve.

- Inform visitors and tourism operators of Restricted Area status by installing signs at appropriate locations and in any new interpretation material for the reserve.

- Monitor the breeding success of Australian kestrels, peregrine falcons and little penguins.

- Tourism operators visiting any penguin or shearwater breeding sites are required to comply with the guidelines given in notesheets prepared by the Parks and Wildlife Service (see Appendix 4).

- Monitor the conservation status of the Stanley snail. If necessary, use signs to restrict public access to snail habitat.

- Conduct fauna surveys to fill gaps in knowledge useful for management and protection.

- Discourage visitors from feeding wildlife by making them aware of the harmful effects of inappropriate food and dependence on humans.

**3.8 Cultural Heritage**

**3.8.1 Aboriginal Heritage**

The Aboriginal heritage of The Nut State Reserve has not been systematically investigated. European knowledge of human history in the north-west is restricted to a combination of historical records and archaeological investigation of the sites created by thousands of years of Aboriginal occupation and use. Evidence shows that Aboriginal people have lived in Tasmania continuously from at least 37,000 years ago.

The reserve contains a number of sites, mainly in the form of middens, quarries and artefact scatters. There are also a number of stone arrangements along the coastline of the reserve. The reserve provided food sources in the form of seafood, vegetable foods and game.

The Aboriginal sites and the landscape of the reserve have a strong and continuing significance to the Tasmanian Aboriginal community. Sites need to be located and protected, particularly from the impacts of visitor use. There is potential for the Tasmanian Aboriginal community to promote and interpret these sites to the wider community and provide greater understanding of Aboriginal culture in the reserve.

New legislation dealing with Aboriginal heritage management is currently under consideration. At present, the *Aboriginal Relics Act 1975* applies.

**Objectives – Aboriginal Heritage**

- Identify and record sites of Aboriginal heritage.

- Protect and conserve Aboriginal heritage.

- Interpret Aboriginal heritage.

**Policies**

- Aboriginal heritage values will be assessed and protected in accordance with this management plan and any agreed national or state charter or guidelines for Aboriginal sites.

- Sites of Aboriginal significance will not be publicised unless the site has been assessed, in cooperation with the Aboriginal community, for educational or interpretative use. Where applicable, make use of any agreed Aboriginal interpretation strategy.

- The Aboriginal community will be consulted on any undertaking or development, which may impinge upon Aboriginal sites.

- All proposed landscape modification, development, or maintenance within the reserve will be subject to the prescriptions of Section 4.6.

- As far as possible, development will be located well away from areas of Aboriginal heritage.

- Aboriginal heritage will not be deliberately disturbed for management, development or research purposes unless the Director determines there is no practicable alternative and a permit to disturb Aboriginal relics has been issued under the *Aboriginal Relics Act 1975*. 
Actions

• In cooperation with the Aboriginal community, identify and record Aboriginal sites.

• Report all Aboriginal sites discovered in the reserve to the Director, in accordance with the Aboriginal Relics Act 1975.

• Consult with the Aboriginal community on the management of Aboriginal heritage.

• Develop interpretation of the Aboriginal heritage in consultation with the Aboriginal community.

• Monitor Aboriginal sites for, and protect them from, damage.

3.8.2 Historic Heritage

Captain Matthew Flinders and George Bass first sighted and named Circular Head on 5 December 1798 during their famous circumnavigation of Van Diemen’s Land on the sloop Norfolk.

In 1824, a group of British businessmen formed the Van Diemen’s Land (VDL) Company and sought a large land grant in the colony for growing wool. In 1825, a Bill passed in Parliament allowed the VDL Company to select 250,000 acres in the remote north-west. The Hampshire Hills were chosen as the centre for company activities in 1827. Circular Head did not become the major company establishment until the early 1830’s, when Edward Curr, the chief agent for the company, decided to transform the first Highfield House, a wooden building, into a stone house more fitting its new importance.

The VDL Company grazed sheep on The Nut and then later leased the land for grazing to the Smith family who held the lease until 1964. The Smiths burned about 50% of the area of The Nut on an annual rotational basis. The cessation of regular firing and grazing has probably greatly assisted the spread of gorse since the 1960’s.

Under its 1825 charter, the VDL Company was prohibited from engaging in whaling and sealing, but its charter was changed in 1832 to allow limited funding of others to engage in whaling from Circular Head. Two seasons of whaling were equally unsuccessful and the venture was written off as a complete failure (Evans 1993). A simple tryworks was erected near the jetty at Stanley wharf, though no evidence of the tryworks remains (Kostoglou 1995).

In 1857, Tasmania was linked to Victoria via a submarine telegraph cable which ran from Stanley via Three Hummock and King Islands to Cape Otway. The cable failed in 1861. In 1935, the first Bass Strait telephone cable ran from Apollo Bay via King Island to Perkins Bay near Stanley. In 1937, microwave transmitting and receiving arrays were built on The Nut and a radio telephone link was established on 6 November 1940. The Green House (now the Nut Rock Cafe) was built in 1941 to house telecommunications equipment, and was used until radio links were established between Victoria and Launceston via Flinders Island in 1966 (DLPW 1987).

Anecdotally, the first television transmission from Victoria to Tasmania took place in the Green House, when the 1956 Melbourne Olympic Games were viewed by a small group of people (Scott, pers comm). The Green House is now subject to lease for operation as a kiosk and tearooms until 30 June 2014. The lessee is responsible for any refurbishing, maintenance and cleaning of the inside of the building and maintaining the grounds. The public toilets and maintenance of the outside of the building is the responsibility of the managing authority. An historical survey and inspection of the site is needed to ensure its cultural values are protected and a maintenance regime is established.

The PMG (Post Master General) Lineyard consists of several timber and corrugated iron workshop structures, forming a small yard. It is located in the reserve on Browns Road just past the Stanley Burial Ground. The Lineyard is associated with early telecommunications equipment and was developed in the late 1930s as a storage facility for telephone equipment and lines, as well as a workshop for maintaining vehicles. It fulfilled this role until 1966. Then it was used by the Circular Head Council as a storage depot and maintenance yard until 1993. The buildings have not been used or maintained since 1993 except as temporary storage by the Parks and Wildlife Service. Options under consideration for the future use of this site are given in Section 5.5.1.

Appendix 6 provides reports on the historic heritage values and management requirements for the Green House and the PMG Lineyards.

Objectives – Historic Heritage

• Identify and record historic heritage in the reserve.

• Protect and actively conserve historic heritage from damage.
• Present and interpret historic heritage.
• Exclude intrusive development and activity.

**Policies**

• Conservation and management of historic heritage in the reserve will adhere to the Burra Charter (see Marquis-Kyle & Walker 1992) and its associated guidelines.
• A conservation policy statement or conservation plan, including specific assessment of significance, will be prepared before any decisions about major works, use, removal or interpretation of individual elements of historic heritage. Such statements or plans will be prepared in accordance with the principles outlined in the Burra Charter, using the methodology outlined in Kerr (1996).
• To avoid disturbance of historic ground features, including sub-surface remains, and archaeological deposits such as building footings, drainage channels and tracks, an archaeological assessment will be required before approval of any development or ground-breaking work in areas of heritage significance (see Section 4.6).
• A cyclical management regime will be developed and operated for historic places in the reserve.
• Adaptations to heritage structures such as the Green House will be readily reversible and new services will not be apparent from outside or impact on heritage values.
• Accurate, detailed working documentation, appropriate to the scale and significance of the works, will be prepared prior to any conservation works, and then prepared to record any conservation works ‘as built’.
• Introduced plants of heritage significance will be retained and, if necessary, replaced to maintain continuity of the historic cultural landscape.
• Introduced plants and cultural landscapes retained for their heritage significance will be managed to prevent their invasion of indigenous plant communities.

**Actions**

• Identify, record and assess the condition and significance of all historic features (already done for the Green House and the PMG Lineyards; see Appendix 6).
• Make safe any dangerous structures, in keeping with their heritage significance.
• Remove any damaging uses, activities and developments that intrude upon or detract from heritage values.
• Prepare conservation policy statements or plans for all significant historic heritage features.
• Catalogue, appropriately store, or present historic artefacts to visitors. When warranted, adopt conservation measures.
• Identify community values associated with historic places and encourage community participation in conservation of these places and values.
• Maintain a record of historic places for the purpose of management, monitoring, research, public interest and accountability.
• Undertake a survey of historic values of the Green House and surrounding precinct with a view to establishing a management program for the site, including a cyclical maintenance, catch-up maintenance and monitoring works regime.
• Ensure adequate fire protection measures are undertaken by lessees of the Green House.

### 3.8.3 Cultural Landscape

The Stanley Peninsula, the Green Hills, Highfield House, the village of Stanley and The Nut State Reserve combine to create a landscape of historic and cultural value. This landscape is the basis for the tourism industry in the district and an important part of any tourism strategy for north-west Tasmania. Maintenance of the appearance of this cultural landscape is important to the local community.

One of the management objectives for State reserves in general is to rehabilitate these areas following the adverse effects of fire, introduced species, diseases and soil erosion. In the case of The Nut State Reserve, the value of the cultural landscape must be weighed against the value of restoration of the forests that may have been present prior to European colonisation. It is unlikely that the summit was completely forested, as shown in Figure 1, due to the headland’s constant exposure to north-westerly winds. Buildings or developments which rise above the skyline mar the cultural landscape value of The Nut.
Objectives – Cultural Landscape

- Identify and maintain significant heritage vegetation and cultural landscapes such as the skyline.
- Revegetate or allow natural regeneration of all other disturbed areas.

Policies

- Cultural landscape management will be based on:
  - identification and protection of significant viewfields; and
  - identification, management and maintenance of significant cultural landscapes and heritage vegetation.
- Installations or buildings that impinge on the skyline of The Nut will not be permitted.
- Revegetation programs will use local provenance seed or seedlings of grass, shrub and tree species.
- Revegetation will be undertaken in accordance with the Stanley Peninsula Vegetation Management Plan (Attwater and Thorp 1998).
- Relevant archaeological, historic heritage, botanical and zoological information will be used in developing cultural landscape management programs.
- Introduced plants of heritage significance, such as the macrocarps in The Hollow area, will be retained until such time as an arborist deems them unsafe. The expense of maintaining them and the impact of seeds from mature trees does not warrant replanting.

Actions

- Identify and protect significant cultural landscape viewfields both from the reserve and viewing The Nut from a distance.
- Assess the visual impact of proposed developments, including major revegetation works, on cultural landscape values prior to approval of such developments.
- Where feasible, remove, relocate, or replace facilities (such as the fire radio repeater tower and shed, Section 4.1) whose location or design significantly impacts on scenic or indigenous fauna values.
- Identify, record and assess the significance of historic plantings and cultural landscapes.
- Maintain, propagate and re-establish significant historic plantings.
- Prevent the spread of introduced plant species retained for heritage purposes.
## 4 Protection

### 4.1 Fire Management

The managing authority is responsible under the *Fire Service Act* 1979 and the *Fire Service (Miscellaneous) Regulations* 1996 for all aspects of fire management within the reserve, including prevention, containment and suppression. In the case of The Nut State Reserve, the Tasmanian Fire Service (TFS) is responsible for fire suppression in the first instance under the provisions of the *Inter-Agency Fire Management Protocol* 1998. The managing authority is responsible for slashing and maintenance of fire trails.

The focus of wildfire prevention is on protection of neighbouring properties, and areas of high environmental, conservation or heritage significance.

The highest priority for wildfire suppression is protection of visitors, neighbouring properties, and reserve facilities and buildings. Nevertheless, during a wildfire, fire behaviour and suppression necessity will determine the on-ground actions and may mean that priorities need modification on the day. High fuel loads, particularly on the inaccessible cliffs of The Nut may preclude direct suppression of any actively spreading fire.

The safety of visitors on the summit of The Nut in the event of fire is of particular concern. The topography of The Nut means that visitor use of the reserve is mostly limited to the carpark and kiosk area, the walking track, chairlift and the summit of the reserve. Carelessness by visitors with cigarettes and matches poses a fire risk to visitors on the summit, the reserve and the town. Slashing of grass on the summit of the reserve helps to protect visitors and assets.

Emergency and management vehicular access is currently available along a series of fire trails around the base of the reserve. If fire trails become overgrown and fringed by very high fuel loads they become unsuitable for their intended purpose. The reserve boundary (see Map 1) follows the rear boundaries of private blocks along Alexander Terrace in Stanley. It is important to maintain the two parallel fire trails and the firebreak between them along this boundary. Neighbours in Alexander Terrace must also take care to ensure that fuel loads on their properties and their own fire management practices do not put the reserve, neighbours or the town at risk.

Several residents in Alexander Terrace have requested access to the rear of their properties from the lower fire trail. The fire trails are not public roads, and licences to use them will be required.

The Nut was burned frequently in the recent past to improve grazing for sheep. This has resulted in the extensive gorse and weed cover, which now requires intensive management to reduce fire risk and the spread of weeds (see Section 4.2).

**Objectives – Fire Management**

- Protect visitors and management staff.
- Protect neighbours and their property.
- Protect reserve facilities and assets.
- Maintain or improve nature conservation values.

**Policies**

- Fire management will accord with this management plan.
- All fire management actions will accord with the provisions of any approved Conservation Plan prepared for cultural heritage sites in the reserve.
- On the basis of contemporary knowledge, fire management priorities will be directed towards fire regimes and provision of fire protection considered necessary to protect human life and property.
- Fire management and suppression procedures will accord with the Inter-Agency Fire Management Protocol agreed between the Department of Tourism, Parks Heritage and the Arts, the Tasmania Fire Service and Forestry Tasmania (Forestry Tasmania et al, 2002).
- Under the Protocol, the Tasmania Fire Service has first suppression responsibility. Within the capacity to do so, Parks and Wildlife Service personnel and equipment will be provided. Assistance may be sought from Forestry Tasmania.
- Fire management will be undertaken in consultation with relevant authorities and
local landholders, taking into account the interactions between the characteristics of fuel accumulation, slope and aspect.

- All fire management actions including habitat management burning, fuel reduction burning, water hole and fire track construction or maintenance will be undertaken in accordance with Section 4.6.

- Fuel reduction, including burning, slashing, mowing, and similar methods, may be used for wildfire prevention and containment.

- Ecological management burning may be undertaken.

- Fire frequencies set out in ecological management programs will aim to maintain viable populations of and/or habitats for plants and animals of conservation value.

- All practicable measures consistent with this management plan will be taken to diminish the risk of wildfires occurring in the reserve and to lessen their impact.

- Existing vehicular tracks will be maintained if they are required for fire management.

- Fire trails will be available to the public for walking and bicycle riding.

- Public vehicular access will not be permitted on fire trails with the exception of the lower fire trail along Alexander Terrace.

- The managing authority may issue licences permitting motorised vehicle access to private property from the fire trail along Alexander Terrace under the following conditions:
  - the fire trail must be kept clear and accessible to fire and management vehicles at all times;
  - licensees may be required to assist in maintenance of the fire trail;
  - annual licence fees will be charged and will be used to assist in maintaining the fire trail; and
  - the fire trail will be kept gated and locked at all times to prevent general public access.

- Visitors will not be permitted to light fires in the reserve.

- When fire danger conditions warrant, authorised staff may close all or some areas of the reserve by signs and/or restricting access.

- Except on days of relatively low Fire Danger Index, suppression procedures will usually involve bringing the fire to safe edges provided by the sea, firebreaks, and any low fuel areas.

**Actions**

- As a matter of high priority, prepare and implement a fire management plan in consultation with the TFS and the Stanley Peninsula Land and Coastcare Group.

- The fire management plan will include a map identifying the following high priority conservation areas:
  - the cliff edges where the endangered straw daisy occurs;
  - raptor breeding sites and the shearwater colonies;
  - the gorse mite trial site near the entrance to the fire trail behind Alexander Terrace;
  - the ivy covered cliff face above Stanley wharf where the Stanley snail is known to occur;
  - areas where remnant native vegetation communities survive;
  - any future areas identified as having high conservation value; and
  - rehabilitation and revegetation areas.

- Provide suitable fire protection for all structures.

- Explain fire management policies and fire safety procedures to visitors as part of an interpretive program for the reserve.

- Maintain all firebreaks and fire trails.

- Prevent public vehicular access to fire management tracks not designated for such use.

- Maintain the fire trail behind Alexander Terrace to allow emergency vehicle access. Private residents may apply to the managing authority for a key to the gates to allow
access to the rear of their properties under the conditions given in the policy above. These residents will be expected to assist in track maintenance as part of their licence conditions.

- Strictly enforce fire restrictions.
- District management staff will ensure that fire suppression equipment for use by local volunteers is maintained to operational standards.
- The managing authority will ensure staff and volunteers are trained in fire prevention and suppression procedures, including fuel reduction burning, wildfire and structural fire fighting, use of fire fighting equipment, and actions to be taken at different fire ratings.

4.2 Introduced Fauna

Exotic mammals introduced to the reserve include rabbits and domestic/feral cats and the occasional dog. Spotlighting, shooting and trapping are effective in controlling feral cats if undertaken at the end of the shearwater breeding season when food becomes scarce and winter is nigh. Domestic dogs sometimes enter the reserve, with or without their owners.

All these exotic pests have impacts on native species and ecosystems. The presence of pest species not indigenous to the reserve is out of keeping with management objectives for the reserve. Information and education regarding the impacts of exotic species should be provided to visitors and locals.

Fencing is used around the lower slopes of the reserve near the town to keep sheep and other domestic animals out of the reserve. Some of the fence posts are rotten and need to be replaced.

Objectives – Introduced Fauna

- Eradicate introduced species where feasible and warranted by the damage being caused.
- Control and manage introduced species where eradication is not practical or warranted.

Policies

- Eradication of introduced fauna will only be attempted where populations of non-target species are not threatened by the proposed methods, unless the threat from the introduced species is greater than the threat from eradication methods.
- Eradication, control, and containment programs and priorities will be based on clear, well documented contemporary knowledge or, where necessary, additional research.
- Except in accordance with the National Parks and Reserved Land Regulations 1999, stock, pets and other domestic animals will not be permitted entry into the reserve, unless used for management purposes.
- When sheep and goats are used for limited grazing of specific areas of the reserve for management purposes, they will be kept under strict control through fencing or other means to keep them off the walking tracks, to prevent damage to shearwater colonies or any areas of high conservation value. Checking and maintenance of the fence will be the responsibility of the stock owner.
- Any proposal to introduce or translocate fauna (including Tasmanian fauna) not historically indigenous to the reserve will require a prior comprehensive scientific assessment before approval.

Actions

- Undertake feral cat control in late autumn when food becomes scarce.
- Monitor introduced animal populations and undertake regular surveys of each species.
- Ensure that locals and visitors are aware that dogs and other domestic animals, particularly cats, are not permitted in the reserve.
- Stock and fencing used for grazing purposes will be checked daily by the owner.
- The managing authority will replace rotten fence posts and ensure that fencing around the reserve is in good repair.

4.3 Weed Management and Revegetation

Fire and weed management are the biggest issues in the reserve. Effective control and management of weeds is necessary and priority targets for control have been identified and programs are underway. In order to continue the good work and not waste previous funding and
effort, ongoing planning, commitment and resources are required. The managing authority for the reserve has a responsibility to prevent, as far as possible, weed spreading from reserve land to neighbouring land, particularly farmland and pasture.

The Stanley Peninsula Land and Coastcare Group have made significant progress in gorse and weed removal and revegetation of the reserve with local native species since 1994. Their efforts have been concentrated on the southern side of the summit in the sheltered hollow and along the walking track to the summit (see Map 3). Using the cut and paint method of control, the group has cleared and replanted about two hectares with native trees and shrubs grown from locally collected seed. This sheltered hollow now has the potential to become an informal picnic area and refuge for birds and wildlife.

Every effort should be made to assist and to encourage the Stanley Peninsula Land and Coastcare Group to continue their work. Problems in the past have arisen when the managing authority has not been able to provide supervisory personnel or been available to approve works on days with optimal weather conditions. Funding and resources are necessary to continue their weed control programs, particularly spraying programs and to continue their revegetation efforts.

Patch burning alone is not seen as a good option for wildfire prevention and grass control on the summit, because thistles and gorse regenerate so easily following fire, particularly on bare patches of soil. Grazing with sheep and goats were recommended as the best option for fire and gorse control (DLPW 1987). Sheep were used until 1996 to keep the grass down and to graze new shoots of gorse.

After years of experience, investigations and reports, it appears that the best option for weed and fire management is a combination of patch burning, slashing, grazing, spraying
and biological control agents in conjunction with a replanting program. These methods, if undertaken in a mosaic pattern and over a sustained period, will eventually work, meeting reserve management objectives and aiding in weed eradication efforts on the whole peninsula.

While the restoration of the summit vegetation to the eucalypt forest of pre-European settlement is desirable to some, it is not seen to be compatible with the protection of Stanley from fire. It is likely that the summit is too exposed to winds to allow such revegetation to succeed. Native eucalypts and blackwoods should be used to revegetate certain areas, like the hollow on the southern side, to produce sheltered areas for visitors and wildlife.

**Gorse control**

Gorse *Ulex europeas* infestations occur on the north, west and south facing slopes of The Nut, on the cliff edges and in patches on the summit. Patch burning of gorse is effective only if followed up over the next couple of years with the application of poison and replanting of the area with native species to compete with regrowth. Broadacre poisoning is not an option due to possible wind-drift effects on native flora and fauna species. Sheep will only graze young shoots of gorse, and goats will only eat it if nothing else is available. Fire promotes seed germination, and the seed bank is very long-lived. Biological control agents are being trialled in Tasmania, and a trial release of gorse mite (see Appendix 7) in February 1999 seems to be effective and significantly reducing the vigour of the affected plants. Other biological control agents are being tested, and a combination of these with more traditional methods of gorse removal (burning, poison, grazing) will allow native plants to re-establish and outcompete gorse. Native species are far less flammable than gorse.

The slender thistle *Carduus tenuiflorus* and the milk thistle *Silybum marianum* are listed as noxious weeds under the *Weed Management Act 1999*. They colonise disturbed bare soils and thrive in shearwater colonies. Spraying and slashing over winter are most effective in controlling thistle species.

The Introduced Plants Policy (Appendix 8) gives general guidance for dealing with weeds and exotic species on reserved land. Appendix 9 and the Stanley Peninsula Vegetation Management Plan (Attwater & Thorpe 1998, pages 15-19) describe specific weed management and revegetation programs and should be used to inform works programs of the managing authority, the TFS and the Land and Coastcare Group.

Map 3 is provided to assist in planning. Aerial photography of the reserve is available for 1995, 1998 and 2000 from Service Tasmania shops to assist in mapping and monitoring of works. These photographs must be enlarged to be useful.

**Objectives – Weed Management and Revegetation**

- Eradicate weeds where this is feasible and warranted.
- Control and manage weeds where eradication is not possible or warranted.
- Revegetate areas with local provenance native species in conjunction with weed control programs.
- Revegetate the reserve in a manner that will provide a mosaic of vegetation and shelter for visitors and encourage more abundant and diverse native wildlife.

**Policies**

- Weed management will be linked with:
  - protection of natural and cultural values;
  - erosion control; and
  - revegetation works.
- An integrated regional approach to weed management, involving neighbouring land owners and managers, will be supported.
- Eradication or control of weeds will only be attempted where non-target species are not threatened by the proposed methods, unless the threat from the weeds is greater than the threat from eradication methods.
- In general, weed management will accord with the provisions of the introduced plants policy given in Appendix 8.
- Weed eradication, control, and containment actions and priorities will be based on Appendix 9 and the Stanley Peninsula Vegetation Management Plan (Attwater and Thorpe 1998, pp15-19).
- The assistance of volunteers will be sought for control and eradication where suitable planned and the managing authority has approved programmed works.
• Introduced plants and cultural landscapes retained for their heritage significance will be managed to prevent their invasion of indigenous plant communities.

**Actions**

• The managing authority will undertake weed management and revegetation plans based on the information provided in Appendices 8 and 9 and in Attwater and Thorp (1998), in consultation with the Stanley Peninsula Land and Coastcare Group and the TFS.

• Eradicate, control or contain gorse, broom, boxthorn, thistle and other weeds as far as possible as one of the highest priorities for management of the reserve.

• Ongoing weed management and revegetation programs will be adequately funded and resourced as a high priority, sufficient to allow progress to continue to be made.

• The managing authority will monitor the impacts of grazing on rehabilitation and revegetation, and assess the benefits of grazing as a fuel reduction method.

### 4.4 Soil Conservation and Erosion Control

Soil erosion from past clearing, firing and grazing is a problem, particularly on the summit area of the reserve. Erosion is also occurring in some places on the walking track on the summit.

Some action has been taken but more work is required to control existing erosion problems and prevent future degradation.

**Objective – Soil Conservation and Erosion Control**

• Prevent erosion and rehabilitate damaged areas.

**Policies**

• Erosion hazard and status assessments will be made where significant ground disturbance or soil exposure is proposed.

• Land rehabilitation and stabilisation will be carried out on the basis of a prior geomorphological assessment.

**Actions**

• Rehabilitate, revegetate or otherwise stabilise disturbed or eroding areas.

• Stabilise areas of the walking tracks on The Nut where erosion is occurring.

### 4.5 Managing Visitor Impacts

One of the objectives of State reserves is to encourage tourism, recreational use and enjoyment consistent with the conservation of the reserve’s natural and cultural values.

**Objectives – Managing Visitor Impacts**

• Protect, maintain and monitor natural and cultural values.

• Protect, maintain and monitor the special tourism and recreation character of the reserve.

• Perpetuate the reserve in a state that is valued by locals and visitors.

**Policies**

• Visitor numbers, services and activities will be limited to those that are ecologically sustainable.

• The best available and practicable technology will be used to protect environmental quality from human impacts.

**Actions**

• Inform visitors of, and encourage them to apply techniques for minimal impact use of the reserve.

### 4.6 Managing Development

Development can range from manipulative research, works such as installation of a toilet, to constructing new buildings or refitting existing ones, and installing or repairing services. It also includes fire management works such as prescribed burning.

Major developments are large in scale, often have high public interest and/or the potential for substantial impacts on the values of the reserve or have a material impact outside the reserve. Major developments in the reserve would include new carparks, major road works and visitor centres.
The entire reserve is located within the Historic Zone defined in the Stanley Conservation Guidelines (Circular Head Council 1996), and any application for subdivision or building development within the reserve must be referred to the Historic Advisory Committee of the Circular Head Council for advice.

The National Parks and Reserves Management Act 2002 requires that, in managing development on reserved land, regard must be taken of the Resource Management and Planning System objectives. The Land Use Planning and Approvals Act 1993 has been amended to apply to reserved land, so that development applications will be required to be lodged with the Circular Head Council for certain types of development.

**Objectives – Managing Development**

- Avoid or minimise the impact of development works on reserve values.
- Protect, maintain and monitor the special tourism and recreation character of the reserve.
- Foster public confidence in the approval process for new developments.

**Policies**

- All development will accord with this management plan.
- All proposals for any development, landscape modification, research, management or maintenance work involving any ground breaking, structural disturbance, or environmental manipulation of any kind will be assessed in accordance with procedures approved by the Director.
- Development will be limited to that allowed by management zoning (see Section 2.4).
- In all zones, site planning commensurate with the scale and type of proposed development will be undertaken to control and guide development.
- Development in the Visitor Services Zone will accord with an overall site plan for the entire zone.
- Development in the Recreation and Natural Zones will be limited to that permitted by the zoning. Any such development will require a Reserve Activity Assessment to be carried out and may require a site plan.
- For all major developments and for proposed site developments or changes that will, while permitted by the zoning, appreciably alter the existing use or character of a zone, a development specific site plan will be prepared. The site plan will be lodged with Council as a development application, which will be available for inspection and public comment.
- All development will meet applicable statutory requirements and standards.

**Actions**

- Confirm statutory requirements for planning and building approval before proceeding.
- Where they apply, ensure compliance with relevant Australian standards.
- Provide visitors with on-site information about the intent and progress of any significant developments.
- Ensure development is consistent with the Tasmanian State Coastal Policy 1996.
- Ensure the design, placement and construction of facilities is consistent with the scenic values of the reserve.
- Rationalise provision of facilities where impacts or demand do not warrant the number or type of facilities provided.
- Provide visitors with on-site information about the intent and progress of any significant developments.
5 Tourism, Recreation and Visitor Management

5.1 Understanding the Reserve Visit

The Nut is the most well known landmark in the north-west of the State and the main tourism drawcard of the region. The landform, the historic town, the chairlift and the views from the summit attract people. Most visitors to the reserve arrive by car, driving up Browns Road, past the Stanley Burial Ground and the PMG Lineyard. Locals and visitors staying in town may walk to the reserve up Browns Road or via pedestrian access from Alexander Terrace, which runs below the eastern side of the reserve (see Map 1).

The chairlift operator in the reserve estimates that over the last two or three years, at least 40,000 people use the chairlift and 10-15,000 walk up to the summit each year.

Objectives – Understanding the Reserve Visit

• Understand visitor pressures on the reserve.

• Provide the basis for effective visitor management.

Policy

• Visitor research will be focussed on improving the inventory and understanding of visitor numbers and characteristics, behaviour, needs and expectations, and assisting visitor management.

Actions

• Collect visitor arrival information regularly at the reserve using road counters or other means.

• Monitor and investigate visitor pressures on the reserve.

5.2 Promoting the Reserve

Good marketing and pre-visit information will attract visitors seeking the experiences provided by the reserve and direct others to areas more suitable for their needs. It will also allow visitors to plan their visit to the region to experience the variety of attractions available. Most visitors to the north-west region visit The Nut, so information about the region should be available on site.

Tourism Tasmania regularly surveys visitors to the state from the mainland and overseas. In 1998/99 (Tourism Tasmania 1999), of a total of 524,000 interstate and overseas visitors to Tasmania, about 108,500 went to Stanley. Of these, 43,900 spent at least one night in Stanley.

The variety of accommodation and eating establishments in Stanley has increased greatly in the last 10-15 years. The Nut and the historic attractions in Stanley make a significant contribution to the north-west tourism industry.

Objectives – Promoting the Reserve

• Promote the reserve to potential visitors by emphasising the following features and values of the reserve:
  • its value as a landscape, landmark and tourism icon for the north-west;
  • its historic connection with Stanley, Highfield House and Woolnorth;
  • as a geological feature of the region and Tasmania;
  • its ongoing importance to the local Aboriginal community;
  • its value in conserving a remnant of native vegetation on lowland basaltic soils;
  • as a breeding site for short-tailed shearwaters, kestrels, little penguins and peregrine falcons;
  • as habitat for several threatened species; and
  • its recreational value for walking, scenic viewing, nature study and bird watching.

• Encourage visits to the reserve and the region.

Policies

• The tourism and recreational themes for The Nut State Reserve, based on the features and values of the reserve listed above, are:
  • historical and cultural landscape;
  • scenic coastlines and beaches;
  • flora and fauna conservation; and
  • recovery and revegetation.

• All tourism and recreational development and marketing for the reserve will conform
with and emphasise the tourism and recreational themes.

- Cooperative promotion of the reserve with regional tourism groups will be encouraged.

**Actions**

- Develop and implement a visitor strategy for the reserve consistent with this management plan.
- Liaise with Tourism Tasmania, Circular Head Council and local tourism groups in developing and implementing the visitor strategy.
- Publicise the features and values of the reserve.
- Use visitor monitoring and research to guide future marketing of the reserve and related attractions.

### 5.3 Interpretation and Education

Visitors are increasingly looking to enjoy, understand and appreciate their visit through high standard presentation of information, interpretation and education. Therefore, interpretation and education are critical to the delivery of quality experiences, as well as fostering an appreciation of and caring attitude towards the reserve (Department of Tourism, Sport and Recreation, 1994).

Good quality interpretation panels were prepared and installed about ten years ago. Three panels near the Green House describe the wildlife and vegetation of the reserve, the geology of The Nut and history of Stanley as the Van Diemen’s Land Company town. These signs and their rock and timber alcove are now in poor condition and need refurbishing. Further interpretation should be provided at this location about the role of the Green House and The Nut in the State’s telecommunications history (see Section 3.8.2) and on the revegetation and rehabilitation efforts of the local community.

Signs are also provided at three lookouts on the summit. These describe the views over Stanley, the wharf and the shearwater colony. These signs are still in reasonably good condition but will require updating to include an explanation of the need to restrict public access to protect nesting birds during breeding season.

**Objectives – Interpretation and Education**

- Encourage pre-visit awareness of the reserve’s special recreational and tourism character, facilities, opportunities and experiences.
- Reveal the diversity and values of the natural and cultural heritage features of the reserve.
- Explain the different uses of the reserve over time and the effects of those uses on the reserve.
- Explain the change in vegetation from forest to pasture to weeds and the efforts of managers and local volunteers in rehabilitation of the reserve.
- Encourage visitors to pursue their interests and explore what the reserve has to offer.
- Realise the educational values of the reserve.
- Canvas issues to be confronted in managing the reserve.
- Increase public awareness of safety issues.
- Inform visitors of reserve etiquette and minimal impact practices.

**Policies**

- High priority will be given to provision of good quality visitor information and interpretation.
- Interpretation programs and facilities will mainly be concentrated in the Visitor Services Zone. Some basic interpretation may be provided in the Recreation Zone. No interpretation facilities will be located in the Natural Zone.
- Use of the reserve for teaching about its environmental and heritage values will be encouraged, particularly programs which emphasise:
  - Aboriginal use of the reserve (to be done in consultation with the Aboriginal community);
  - weed management and control (in consultation with the Stanley Peninsula Land and Coastcare Group);
  - revegetation and rehabilitation of the reserve (as above).
• School and other groups undertaking educational activities will be encouraged to discuss their proposed program with Parks and Wildlife Service staff when planning their visit.

Actions

• Provide prospective reserve visitors with pre-visit information.

• Reconstruct the timber and rock alcove and reinstall interpretation signs.

• Provide further interpretation about the telecommunications history of The Nut, special flora and fauna, wildlife viewing guidelines and weed management and rehabilitation programs in conjunction with any upgrade of existing interpretation signs.

• Maintain interpretation signs and facilities in good order; undertake pruning of vegetation, cleaning and inspection on a biannual basis.

• Develop interpretation of the Aboriginal heritage of the reserve and the region in consultation with the Aboriginal community.

• Educate and encourage visitors to adopt safe practices and provide them with sufficient information about potential hazards to enable them to make responsible decisions.

5.4 Access to the Reserve

Objectives - Access

• Maintain, develop and promote opportunities for people, including those with disabilities, to visit.

• Protect reserve values by concentrating and limiting developed visitor arrival points and travel routes to designated locations.

• Direct and develop access within the reserve appropriate to the zone in which it occurs.

5.4.1 Air Access

There are no aircraft landing sites in the reserve.

Policies

• Airdrops within the reserve will only be permitted for management or emergency purposes.

• Except in an emergency, or for management purposes, all aircraft, including helicopters, will require an authority to land or take off in the reserve, as required by the National Parks and Reserved Land Regulations 1999.

Actions

• In consultation with the Civil Aviation Safety Authority, the Royal Australian Air Force, and commercial and private pilots, develop, or make use of existing overflight guidelines to minimise the impact of low flying aircraft on the recreational experiences of reserve visitors and on wildlife.

5.4.2 Vehicular Access

Browns Road is the only road access to the reserve and provides adequate access for all vehicle types, including buses. The road is the responsibility of the Parks and Wildlife Service from the reserve boundary at the junction of Marshall Road and Browns Road. The carparks at the end of the road have a maximum capacity of 50 vehicles. The upper and lower carparks have recently been leveled and sealed, with drainage improved and curbing provided to improve access and public safety.

Fire trails in the reserve allow limited access to management and emergency vehicles. Consideration is being given to allow access to the rear of some properties on Alexander Terrace (see Section 4.1).

Policies

• The managing authority will maintain the road and the carparks in a safe and navigable condition for both cars and buses. The present area of the carparks may not be enlarged unless provided for in an approved site plan (see Section 4.6).

• Before construction of any new roads or vehicular tracks, or re-routing of existing ones, survey the proposed route for disease risk, habitat and species significance, and heritage significance.

• Roads and vehicular track development and maintenance will accord with the prescriptions of Section 4.6.

• Those private property owners who wish to have vehicular access along the fire trail behind the properties on Alexander Terrace will require the permission of the managing authority, a key to the gate and a licence for
which an annual fee may be charged. The managing authority may require these users to maintain the trail in a state that allows fire vehicle access.

**Actions**

- Monitor the condition of and maintain the carparks as required to provide adequate and safe parking for up to 50 vehicles and 2 buses at a time.
- Ensure that Browns Road is maintained at a safe and accessible standard for vehicles and buses.
- Gate or otherwise restrict public vehicular access to the fire trails located above Alexander Terrace (see section 4.1).
- Permanently close roads and vehicular tracks not required for public or management use.

**5.4.3 Chairlift Access**

The chairlift provides access to the summit of the reserve from a lower terminal station located behind the Green House kiosk and tearooms to the upper terminal located about 40 metres east of the rim of the reserve. Disabled access to the lower terminal is available by a vehicle track from the carpark to the lower terminal, and chairlift operators can assist the disabled to get on and off the chairlift. Wheelchairs can also be put on the chairlift. It rises 95 metres over a distance of 240 metres in about five minutes.

A local manager operates the chairlift for Gippsland Chairlifts Pty Ltd. Their current lease and licence to operate run until 1 December 2005 with a ten year renewal option. Under the lease and licence conditions they are required to:

- comply with the *National Parks and Wildlife Act 1971*;
- maintain and camouflage all equipment;
- reduce fire risk by restricting smoking;
- keep the lease area clean and tidy;
- develop no further tracks or vehicle access; and
- remove flora or excavate only with the permission of the managing authority.

**Actions**

- Further to the conditions above, the lessee will remove exotic and potentially invasive species from the upper terminal area and revegetate with local provenance native species.

**5.4.4 Walking Access**

Walking access from Stanley to The Nut State Reserve is available along Browns Road or from a public right of way located about halfway along Alexander Terrace that meets up with the lower fire trail in the reserve. The walking track to the summit begins from behind the carpark and the Green House kiosk and tearooms and meets the summit circuit track at the upper chairlift terminal. The track is very steep but short, taking only about 20 minutes for a person of average fitness. It has a handrail along its length and two resting points with benches to sit upon. It rises a vertical distance of less than 100 metres over a distance of 300 metres. Improvement to the grade of the track would require quite substantial ground disturbance, work and expense. Because the chairlift provides good alternative access, alterations to the walking track are not necessary, as long as the track is maintained in a safe condition for public use.

The summit walking track is simply a slashed path through the grass on top of The Nut. In places, shearwaters have made holes that could injure walkers, and erosion is occurring in some sections. This track should be of a high standard, catering for a diverse range of visitors in all types of footwear.

Short walks around the base of the reserve have been suggested. The fire trails behind Alexander Terrace are available to the public for walking, but signs and interpretation could be used to inform visitors and locals of the availability and use of the trails. A short walk along the northern edge of the reserve on the foreshore could be developed which includes interpretation about the penguins and Aboriginal values of the reserve.

**Policies**

- At all times and in all parts of the reserve, pedestrians have absolute right of way over any motor vehicle, bicycle or other wheeled vehicle.
- The priorities for upgrading existing walking tracks or constructing new tracks will be
determined and approved before any work commences.

• Before construction of any new walking tracks, or re-routing of existing tracks, survey the proposed route for disease risk, habitat and species significance, cultural landscape and historical landscape values.

• Walking track development and maintenance will accord with the prescriptions of Section 5.5.

• Exact track locations and standards will be determined, and construction undertaken, using appropriate guidelines of the Walking Track Management Manual (Blamey, 1987) and/or the Walking Track Management Strategy (Parks and Wildlife Service, 1998) and according to any applicable site plan. An Australian Standard (AS 2156) is being finalised for walking tracks and will supersede the manual and strategy above.

• Where feasible, disabled access will continue to be provided in the Visitor Services Zone.

• A short walking track may be developed along the two fire trails behind Alexander Terrace.

• A walkway and/or viewing platform may be developed on the Crown land north of the Stanley Burial Ground, providing for safe public access, especially for viewing penguins and shearwaters after dark and for use by ecotourism operators.

**Actions**

• Liaise with Council in regard to placing a sign indicating the public right of way on Alexander Terrace.

### 5.4.5 Bicycle Access

The use of bicycles, particularly mountain bikes, is increasing. On suitable vehicular tracks, bicycle use can provide enjoyment for visitors. Inappropriate use of bicycles can cause conflict with other users and impact on environmental, Aboriginal and historic heritage.

**Policies**

• At all times and in all parts of the reserve, bicycle riders will be required to give way to pedestrians.

• Bicycles will only be permitted on public roads and designated vehicular tracks.

• Bicycles will not be permitted the access track to the summit or on the summit walking track.

• The impacts of bicycle use in the reserve will be monitored and their use modified if the need arises.

**Actions**

• Designate and signpost Browns Road and the fire trails along Alexander Terrace as available for bicycle use.

### 5.5 Facilities and Services

The reserve is a valuable tourism, recreational and educational resource that could be developed further. Tourism and recreation facilities and services that respect and complement the inherent values of the place are needed to provide opportunities for visitors to better experience the reserve.

Because of its inherent value as a landmark and historic site, the reserve does not need invented attractions beyond the chairlift. Inappropriate development could have a detrimental impact on the tourism and recreational character of the reserve, both in very obvious and immediate ways, and in more subtle, incremental ways.

The challenge for management is to provide facilities and services in a coordinated way, without destroying the values that attract visitors in the first place. To maintain these values, the type, location and level of facilities and services has to be determined and made explicit.
Locating the spectrum of recreational opportunities by the system of zoning, and maintaining and enhancing recreational settings helps do this.

Existing Facilities and Services

Standard vehicle and bus access is available from Stanley via Browns Road, which runs past the Stanley Burial Ground and the old PMG Lineyard, which is in the reserve. The kiosk and tearooms known as The Nut Rock Cafe were opened in 1983 and are located in the historic Green House at the carpark. Good quality interpretation signs are located in the embankment near the kiosk and situated so that all visitors to the kiosk, the walking track or the chairlift are likely to see them. These need refurbishment as described in Section 5.3. Public toilets are provided next to the Green House and maintained by the lessee of the Green House. The walking track to the summit begins from the carpark, and meets with the summit walking track near the upper chairlift terminal.

The 300 metre long walking track to the summit starts from behind the Green House and climbs very steeply to the summit path that begins near the chairlift terminal. The walking track is asphalt and has a handrail and two benches for resting at switchback corners. The track rises a vertical distance of less than 100 metres and takes about 20 minutes for a person of average fitness.

The chairlift is operated for Gippsland Chairlifts Pty Ltd by a local manager. It began operation in 1987 and consists of a base terminal station located near the Green House. There are twin cables which rise 95 metres via three intermediate supporting towers over a total distance of about 240 metres. The upper terminal station located about 40 metres east of the rim of the escarpment near the summit walking track. The chairlift ride takes about five minutes each way. About 40 000 people ride the chairlift each year.

The walking track up to and around the summit is one of the 60 Great Short Walks in Tasmania. It takes about 20 minutes to the summit and about an hour to walk the 2 km track around the summit. There are good quality interpretation signs at five lookout points along the walk which provide information about the view from each lookout. Two look out over the town of Stanley, two look out over the wharf and the other looks out over the shearwater colony. Each of the lookouts has strong fencing in good condition to protect visitors and children.

During the summer months, shearwaters fly in at dusk to their colonies and some visitors walk up to the summit to watch. There is potential to develop shearwater viewing and on site interpretation as an ecotourism operation.

Overnight camping in the reserve is not permitted, and neither are fires. Water and food are available from the kiosk.

There are no picnic facilities but these could be developed near the kiosk.

Objectives – Developing Visitor Facilities and Services

- Provide opportunities for activities, relaxation, contemplation, enjoyment and educational experiences through direct contact or participatory involvement with the values of the reserve.
- Enrich visitor experiences of the reserve.
- Encourage understanding of and support for the reserve by highlighting and presenting its values.
- Safeguard the special tourism and recreational character of the reserve.
- Minimise impacts on reserve values.
- Promote sound and sustainable environmental behaviour and practices.
- Contribute directly to meeting the costs of research, management and protection of the reserve.
- Provide economic benefit to the community.

While flexibility in response to visitor needs, budgetary circumstances and protection of reserve values must be maintained, the general policies for any development or improvement of visitor facilities and services are set out below.

Policies

- All tourism and recreational development will conform with and contribute to the realisation of this management plan.
- All tourism and recreation development will accord with any requirements and codes established by the Parks and Wildlife Service for sustainable environmental practices and behaviour and protection of heritage values.
• Priority will generally be given to developing visitor facilities in the Visitor Services Zone before any in the Recreation Zone.

• The range of visitor facilities provided will complement rather than replicate those which are or could be provided in nearby areas.

• In the Visitor Services Zone, any major development not already covered by this plan will require a site plan prepared in accordance with Section 4.6 and the site planning guidelines in Appendix 10.

5.5.1 Facilities and Services in the Visitor Services Zone

This zone is intended to serve as the principal location for any further development of day use facilities for visitors to the reserve.

The Visitor Services Zone (see Map 2) includes Browns Road from the reserve boundary, the old PMG Lineyard, the carpark, the Green House (Nut Rock Café) and environs, the public toilets and lower chairlift terminal.

With funding assistance from the Natural Heritage Trust, many improvements have been made in the Visitor Services Zone. Foot and vehicle access has been improved and the carpark has been surfaced and marked. New interpretation and visitor information signs have been installed.

Policies

• Facilities will be provided for day visitors only. Overnight use of the reserve is not permitted.

• Any development within the Visitor Services Zone is to be consistent with the Stanley Conservation Guidelines (Circular Head Council 1996) (see Section 4.6).

• Facilities in this zone may include visitor information and interpretation buildings, carparks, picnic facilities, nature trails, interpretive displays, toilets, management buildings and facilities.

• Construction and maintenance in the zone will be sufficient to withstand the impact of the anticipated number of visitors.

• Potential uses of any historic feature will be determined by preparation of a conservation plan (see Section 3.8.2).

• Site planning and market analysis will be undertaken for any major developments in the Visitor Services Zone, particularly at the site of the old PMG Lineyard (see next section).

• The Director must approve any site plan prepared for the Visitor Services Zone prior to its release for public comment for a minimum of 30 days. The Director and the Minister must approve the final site plan.

Actions

• Any new developments or major redevelopments in the Visitor Services Zone not already covered by this plan will require a site plan as set out in Section 4.6.

• Exhibit any site plans for the Visitor Services Zone for public comment for a minimum of 30 days.

• Encourage efficient energy use by management and visitors.

PMG Lineyard Site

In 1994, the PMG Lineyard (2862 square metres) and the open space block across the road (4500 square metres) were offered to Circular Head Council for purchase, and if sold, were to be revoked from the reserve. At that time, the sale was subject to the following cultural heritage conservation conditions:

a) no further development on the site other than the replacement of the old buildings with similar-sized structures;

b) any developments should be located away from the burial ground (a 10 metre buffer along the boundary); and

c) that it would be desirable to redevelop the site as a picnic area/carpark for the burial ground.

The Council declined the offer because they already had a recreation reserve and carpark near the burial ground.

Cultural heritage specialists have assessed the site (see Appendix 6) and decided that the buildings could be demolished if no further use could be found for them. However, any redevelopment of the site must conform to the policies given above for the Visitor Services
Zone and meet the following site management conditions:

a) the site must be surveyed and recorded by a qualified cultural heritage specialist;

b) a 10 metre wide buffer of open space or vegetation must be provided between the burial ground and any redevelopment; and

c) all footings, paths and surface features must be retained and interpreted as far as possible so that previous historical use is not obliterated.

The PMG Lineyard occupies a prime location at the base of the most visited reserve and tourist attraction in the region. The public was invited to comment on four options for redevelopment given in the draft management plan. No clear preference emerged, however, if redevelopment is considered in the future, then a site plan and the policies of Section 4.6 will apply. Both the Council and the PWS stated that they prefer the site to be cleaned up and the buildings used for a range of non-commercial management purposes.

5.5.2 Facilities and Services in the Recreation Zone

This zone (see Map 2) is essentially a corridor for recreational use and access. It includes the chairlift route, the walking tracks and the lookouts.

**Policies**

- Types of recreational uses and levels of use will be limited to those that minimise impacts on environmental and heritage features and values.

- Facilities in this zone, depending on the location, may be developed to the level of walking tracks, vehicle tracks and signs.

- Track marking and upgrading will accord with prescriptions set out in Sections 4.6 and 5.4.4.

- Signs will be limited to those providing interpretation for visitors at lookout points, giving information on directions, historic features, safety of users, access and/or protection of the reserve.

- Rubbish bins will not be provided in the Recreation Zone and visitors will be required to carry out their rubbish.

**Actions**

- Clearly mark, maintain and, as necessary, upgrade walking tracks (see Section 5.4.4) to ensure protection of the environment and the reasonable safety of users.

- Maintain and as necessary replace interpretation signs at the lookouts on the summit track (see Section 5.3).

- Maintain and as necessary refurbish lookout fences and seating.

- Monitor visitor and commercial user impacts.
5.5.3 Facilities and Services in the Natural Zone

The Natural Zone (see Map 2) includes the open space block along Browns Road, the cliffs, cliff edges and centre of the summit.

Policies

• Except to ensure public safety, environmental or heritage protection, or fire management, there will be no development permitted in the Natural Zone.

• Visitors will be educated about appropriate minimal impact behaviour and practices.

• No visitor buildings or similar facilities will be provided in the Natural Zone.

Action

• Monitor user impacts.

• Monitor the impacts of weed management and rehabilitation programs on the Natural Zone.

5.5.4 Assessing New Development Proposals

From time to time there will be proposals for facilities or services which may not be covered in this plan. The following provides a process for assessing any future development proposals for the reserve.

Policies

• Proposals to develop tourism and recreational opportunities, facilities, or services in the reserve will:

  • be based on the features and values of the reserve;
  
  • ensure the viability, diversity, and values of environmental features and processes are not damaged;
  
  • adopt environmentally sustainable operating practices and use environmentally “best practice” goods and technologies;
  
  • behave and operate in a manner compatible with protection of Aboriginal and historic heritage features and values;

• explain the principles of minimal impact on environmental and heritage values to visitors;

• avoid impact on the legitimate enjoyment and experience by others of the reserve’s features and values;

• contribute to any external costs (for example road or sewerage upgrading) resulting from the proposal; and

• accord with the management plan, being sustainably achievable within the realistic capacity of management resources.

• Tourism and recreation development proposals will conform with and support realisation of this management plan and any approved site plans and/or conservation plans.

• All proposals to develop tourism and recreational opportunities in the reserve will adopt environmental ‘best practice’ methods for:

  • sewage treatment;
  
  • stormwater management;
  
  • water supply;
  
  • energy generation and conservation;
  
  • vehicle storage and maintenance;
  
  • machinery installation and maintenance;
  
  • fuel delivery and storage; and

  • storage and disposal of solid and liquid waste.

• Depending on the proposal, additional assessment guidelines and criteria may be required.

• Development will complement existing facilities and services, foster visitor appreciation and understanding of the reserve’s features and values, and provide high quality service to the public.

• Any sale within the reserve of souvenirs and memorabilia will be focussed on Tasmanian made merchandise directly related to the reserve’s features and values.
• Tourism and recreation development proposals will provide a clearly demonstrated benefit to the north-west region in particular and the Tasmanian community in general.

• All commercial development proposals will submit a detailed business and financial plan showing at least a three year projection of operations, demonstrating economic viability while according with this management plan.

• Any financial, infrastructure, managing authority services, or environmental resource subsidy of a tourism or recreation proposal will be made explicit and public.

• Tourism and recreation in the reserve will directly and identifiably make a contribution to research, conservation or management of the reserve.

**Action**

• Ensure all applicable statutory requirements and approvals are met or obtained.
6 Involving The Community

6.1 Community Involvement and Support

Community involvement and support in management of the reserve is very important. A number of community groups, schools and organisations make regular use of the reserve, as do local residents.

The Stanley Peninsula Land and Coastcare Group have received federal Coastcare funding to undertake weed management and rehabilitation work in the reserve since 1994 (see Section 4.3). They have made significant progress and consequently have gained practical knowledge and expertise that can be shared with the managing authority and the local community.

Community Co-Management Group

One way of involving the community in management of the reserve is to set up The Nut State Reserve Community Co-Management Group to meet with the managing authority. A Co-Management Group is an advisory group that provides a consultative mechanism for the managers in decision-making about a reserve that is adjacent to a local community, where those decisions affect the local community and users of the reserve.

The Parks and Wildlife Service will organise, chair and manage the meetings. The Group will meet at least twice a year, but as often as necessary. The purpose of the meetings will be to discuss management priorities and programs, to discuss problems or conflicts, and to encourage volunteer participation in projects. A constitution is not required, but terms of reference (see Appendix 13) should be developed and agreed to on a consensus basis from the first meeting. Meetings will be minuted and minutes provided to the District Manager, PWS (who will place them on file), the General Manager, Circular Head Council, group members and to any other interested party. PWS will be responsible for inviting participation.

Membership should include, but not be restricted to, representatives from each of the following:

- Parks and Wildlife Service
- Circular Head Council
- Stanley Peninsula Land and Coastcare Group
- Local Tasmanian Fire Service
- Tasmanian Aboriginal community
- Stanley Primary School
- Local tourism interests
- Local business interests
- Local historical groups
- Local community

Objectives – Community Support

- Develop community appreciation of and support for reserve values.
- Promote a positive image of the reserve and its contribution to the community.
- Encourage community involvement in reserve management.

Policies

- The Stanley Peninsula Land and Coastcare Group will be encouraged to continue their weed management and revegetation work in the reserve and to develop partnerships with others interested in the reserve.
- Partnerships will be developed with local schools, groups and communities that wish to be involved in the management of the reserve in accordance with this management plan.
- Volunteers will be encouraged when suitable, planned and programmed works are available.
- Cooperative management programs will be encouraged with Aboriginal people in areas of significance to them.
- Relevant people, communities and groups will be consulted when their interests may be affected.

Actions

- Establish The Nut Community Co-Management Group to meet within three months of gazettal of this plan.
- Encourage volunteer involvement through the WILDCARE structure.
6.2 Working with Neighbours

Objectives – Working with Neighbours

- Take account of concerns of neighbours, particularly those who live on Alexander Terrace, in managing the reserve.
- Encourage conservation and sound land management practices on nearby farmlands and in gardens adjoining the reserve; and
- Enlist the cooperation of neighbours in conserving reserve values.

Policies

- Neighbouring land owners and land managers will be consulted when their interests may be affected.
- Management agreements may be developed with neighbours.
- Land management practices which require off-reserve or cross tenure implementation to protect natural and cultural values will be developed cooperatively with neighbours.

Actions

- Regularly liaise and develop good working relations with adjacent land owners and land managers on management issues and projects of common interest.
- In particular, Parks and Wildlife district staff will work with neighbours on the reserve boundaries, the local volunteers of the Tasmania Fire Service and the local volunteers of the Land and Coastcare Group.
- Ensure that information is shared, particularly weed and fire management information.
7 Other Issues

7.1 Boundaries

The unallocated Crown land on the north-east boundary of the reserve to the east of Browns Road should be added to the reserve to enhance protection of the penguin colony. The reserve on the southeastern boundary should be extended to follow the 100 m contour to include the portion of the summit walking track outside of the reserve and to include the straw daisy populations in the area.

The marine environment around The Nut State Reserve is a complementary and interdependent part of the terrestrial environment of the reserve. Only the intertidal zone between high and low water marks is included on the seaward side of the reserve (see Map 1).

- Add the unallocated Crown land on the northeastern boundary (formerly a quarry reserve) to the reserve, as shown on Map 1.

- Change the southeastern boundary of the reserve to include the land to the 100 metre contour to include the summit walking track and the straw daisy populations (as shown on Map 1).

- If the opportunity arises, incorporate within the reserve any areas which will improve protection of important natural or heritage values, protect the integrity of the reserve, or assist in more effective management.

- If the opportunity arises, incorporate within the reserve any areas that will provide opportunities for or improve presentation of the reserve and provision of visitor services and facilities.

- The disused quarry located above the wharf is Crown land outside of the reserve. It does not contain natural or cultural values that contribute to the reserve and therefore will not be considered for addition to the reserve.

7.2 Leases, Licences and Authorities

The Director is responsible for the issuing and management of all leases, licences and authorities for the reserve. The managing authority is also responsible for collection of any fees or rentals, and for ensuring that these people comply with all licence, lease or authority conditions.

Objectives – Leases, Licences and Authorities

- Provide efficient high quality facilities and services to the public.

- Manage and control uses and activities not undertaken by the managing authority.

- Contribute to recovery of costs arising from leased, licensed or authorised uses.

- Ensure reserve values are protected.

Policies

- All leases, licences and authorities will be consistent with the objectives and prescriptions of this management plan.

- Subject to the National Parks and Wildlife Act 1970 and this management plan, leases and licences to provide services within the reserve may be issued for tourism, recreation, or education purposes.

- The Director may issue authorities to conduct infrequent, organised events or activities within the reserve. Where Section 25B of the National Parks and Wildlife Act 1970 applies, a business licence will be required.

- Leases, licences and authorities may be issued for any zone in the reserve provided that they conform to the objectives and prescriptions for that zone.

- Consistent with Section 4.6 of this plan, an environmental and heritage effects assessment may be required before lease or licence proposals are considered. A detailed, proposal-specific, site plan may also be required.

- Compliance with the terms and conditions of leases, licences and authorities will be monitored and reviewed prior to any renewal.

- Non-compliance with conditions may result in the immediate termination of the licence, lease or authority.

7.3 Research

Research is essential to identifying, understanding and conserving the natural and
cultural values of the reserve, and sustainably managing human use.

Objectives - Research

- Provide a sound basis of knowledge for managing the reserve to achieve the management objectives.
- Assist in resolving complex or controversial management issues.
- Improve overall reserve management approaches and practices.
- Enhance knowledge of the natural and cultural values of the reserve, and related management issues.
- Improve knowledge and management of visitors and their behaviour.
- Assess impacts (including long-term cumulative changes) associated with development and other use of the reserve.
- Avoid putting at risk significant natural or cultural values of the reserve.
- Provide for use of the reserve as a scientific reference area.

Policies

- Critical gaps in information required for management, and other potential research or monitoring projects that could assist management of the reserve, will be identified.
- Researchers and research institutions (and where applicable community groups or schools) will be approached and encouraged to undertake research or monitoring in the above fields.
- Research that addresses the above objectives and/or the following topics will be encouraged:
  - inventory and understanding of the environmental features and processes of the reserve, or its management;
  - inventory and understanding of Aboriginal and historic heritage and archaeological features of the reserve, or its management;
  - inventory and understanding of visitor numbers and characteristics, behaviour, needs and expectations, or their management;
  - impacts and changes (including long-term cumulative changes) associated with human use and development of the reserve; and
  - the efficacy of management actions and practices.
- All proposed research which has the potential to impact on the reserve or its values (including environmental, heritage or aesthetic values) will require written approval of detailed study proposals and methods before research begins, and be subject to this management plan.
- Authorities for the collection of research material within the reserve will not be issued where the managing authority determines that it is possible and appropriate to collect the material outside the reserve.
- The approval of the local Tasmanian Aboriginal community will be required for any research involving Aboriginal heritage.

Actions

- Identify information required for monitoring and management of the reserve, particularly those data identified in Section 7.5.
- Identify other research or monitoring projects which would assist in management of the reserve.
- Encourage researchers, research institutions, community groups or schools to undertake the research or monitoring identified in Section 7.5 and throughout this plan.

7.4 Administration

The managing authority for the reserve is the Director of National Parks and Wildlife. Administratively, the reserve is part of the North West District of the Parks and Wildlife Service, managed by a District Manager. Rangers are directly responsible for day to day management of the reserve. Work is also carried out by contractors, temporary staff and volunteers. In future work may also be undertaken by authorised Council staff.

The intent of the original Partnership Agreement between the Circular Head Council and the State Government was that responsibility for
management of The Nut State Reserve would pass to the Circular Head Council. However, the parties have agreed that the Parks and Wildlife Service will remain the managing authority for the reserve (Implementation Report of 25 June 2002 of the Partnership Agreement between the Circular Head Council and the State Government). In doing so, the two authorities will be able to maximise the benefit of sharing resources and will be able to jointly apply for grants for works, marketing and promotion projects.

**Objectives – Administration**

- Coordinate and integrate reserve management and implementation of this management plan.
- Ensure management responsibilities are efficiently and effectively carried out in accordance with the National Parks and Reserves Management Act 2002 and the National Parks and Reserved Land Regulations 1999 and this management plan.
- Ensure public safety and prompt response in emergencies.
- Enforce the management plan and any other relevant Acts and Regulations.

**7.4.1 Implementation**

The implementation of actions prescribed in this plan are listed and prioritised in Appendix 12.

**Policies**

- The prescriptions of this plan will be subject to the provision of funding and other resources sufficient to meet them, and may be prioritised by the Director at his discretion according to resource availability.
- To coordinate effective implementation of this management plan, the managing authority will develop a rolling works program of at least three years duration in consultation with the council and the Co-Management Group.
- The implementation program will identify:
  - all development and other works planned,
  - scientific studies required,
  - those responsible for each stage of implementation,
  - the anticipated costs,
  - the staff requirements, and
  - ongoing maintenance and monitoring requirements.
- The implementation program will conform to the management plan and other plans such as site plans or conservation plans.

**Actions**

- Train staff to understand and implement the management plan.
- Review the implementation of the management plan annually and revise the implementation program if necessary. Base any revision on analysis of past progress and incorporate newly identified requirements. Add a further year's program at each annual review.
- Annually evaluate the outcomes of management against the objectives of the management plan.

**7.4.2 Search and Rescue, First-Aid**

Tasmania Police and the State Emergency Service have primary responsibility for all search and rescue within the reserve.

**Policies**

- Resources for the reserve will be maintained at a level sufficient to provide a reasonable response to emergency situations.

**Actions**

- Cooperate with Tasmania Police and State Emergency Services in search and rescue operations.
- Maintain a reasonable store of first-aid supplies (St Johns Ambulance kits) at both the upper terminal of the chairlift and at the Green House (the Nut Rock Cafe).
- Staff of the chairlift and café should be encouraged to update their first aid qualifications regularly.
- Educate and encourage visitors to adopt safe practices and provide them with sufficient information about potential hazards to enable them to make responsible decisions.
• Establish a risk management system that provides for regular identification, inspection, reporting and amelioration of existing and potential risks to public and staff safety.

7.4.3 Enforcement

Authorised staff of the Parks and Wildlife Service are responsible for enforcement of all legislation relevant to the reserve and human activities within the reserve.

Policies

• Within the reserve, authorised staff of the Parks and Wildlife Service will be responsible for enforcing the provisions of the National Parks and Reserves Management Act 2002, the National Parks and Reserved Land Regulations 1999 and the Wildlife Regulations 1999, and any other Acts for which staff may be authorised.


• Staff may be authorised to enforce provisions of the Marine and Safety Authority Act 1997 and associated by-laws.

• Other law enforcement will be the responsibility of Tasmania Police.

Action

• If necessary, delegate authority to authorised staff of the Circular Head Council under Section 22(2) of the National Parks and Wildlife Act 1970.

• If necessary, train and authorise staff of the Circular Head Council to enforce the provisions of the Acts and Regulations listed above.

7.5 Monitoring and Evaluation

Objectives – Monitoring and Evaluation

• Assess the effectiveness of management under this plan in achieving the management objectives.

• Provide feedback that will assist the progressive improvement in reserve management.

Policies

• Monitoring programs will be planned and implemented to evaluate the effectiveness of reserve management under this plan in achieving the management objectives.

• Within the first year of the term of the management plan, monitoring programs will be undertaken to document the current (baseline) state of the reserve with regard to the identified performance indicators which follow.

Actions

• Gather baseline data (fixed point photographs, numbers of individuals, maps, etc) for the following performance indicators based on the actions prescribed in this plan. Collect data as indicated for reporting at the five and ten year marks from commencement of this plan:

  • Map the extent of gorse and other weed coverage from aerial photographs (aerial photos are available for 1995, 1998 and 2000 from Service Tasmania outlets). New photographs should be taken at least every second spring for comparison.

  • Map all fire management works and weed control works, as well as any revegetation areas (each year).

  • Map and photograph the known extent of the straw daisy population (each spring).

  • Map and photograph the extent of the gorse mite population and its effectiveness (each spring).

  • Undertake fauna surveys (each autumn).

  • Document control efforts and provide estimates and locations of feral cat and rabbit populations.

  • Using fixed point photography, document the state of the access track and the summit walking circuit (early spring and late autumn).

  • Install a road counter on Brown’s Road at the reserve boundary to obtain more
accurate annual visitor numbers (monthly).

- Request visitor numbers from chairlift operator (annually).

- Provide a summary report to the Director of National Parks and Wildlife and the National Parks and Wildlife Advisory Council (NPWAC) at the end of the fifth year. Include any recommendations for improvement.

- Using the recommendations, adjust management actions or monitoring programs over the next five years.

- At the 10 year mark, prepare another monitoring and evaluation report for the Director and NPWAC.

- Should the management plan not be revised at the 10 year point, continue to undertake evaluations at 5-yearly intervals.
**Biodiversity (biological diversity)** means the variety of life forms: the different plants, animals and micro-organisms, the genes they contain, and the ecosystems they form. It is usually considered at four levels: genetic diversity, species diversity, ecosystem diversity and community diversity.

**Conservation** means all the processes and actions of looking after a place so as to retain its significance, always including protection, maintenance and monitoring.

**Earth processes** means the interactions, changes and evolutionary development of geodiversity over time.

**Geodiversity** means the range or diversity of geological (bedrock), geomorphological (landform) and soil features, assemblages, systems and processes that exist naturally.

**Indigenous species** means a species that occurs at a place within its historically known natural range and that forms part of the natural biodiversity of a place.

**Introduced species** means a translocated or alien species occurring at a place outside its historically known natural range as a result of intentional or accidental dispersal by human activities.

**Natural integrity** means the degree to which a natural system retains its condition and natural rate of change in terms of size, biodiversity, geodiversity and habitat.

**Natural landscape** means large, relatively undisturbed area with topographic and catchment integrity where natural processes continue largely unmodified by human intervention.

**Protection** means taking care of a place by maintenance and by managing impacts to ensure that significance is retained.

**Threatened species** means a species listed in the Schedules of the Tasmanian *Threatened Species Protection Act 1995*. 
References


AUSTRALIAN HERITAGE COMMISSION, 1981; The Heritage of Australia: The Illustrated Register of the National Estate; Macmillan, Melbourne.


DEPARTMENT OF ENVIRONMENT AND LAND MANAGEMENT AND THE STATE EMERGENCY SERVICES, 1997; Tasmanian Marine Oil Pollution Plan, Hobart, Tasmania.


DEPARTMENT OF TOURISM, SPORT & RECREATION, 1994; Ecotourism: Adding value to tourism in natural areas; A discussion paper on nature based tourism, Department of Tourism, Sport and Recreation, Hobart.


GILFEDDER, L. & KIRKPATRICK, J.B., 1994; Culturally induced rarity? The past and present distributions of Leucochrysum albicans in Tasmania; Australian Journal of Botany 42, 405-16.


MARQUIS-KYLE, P., & WALKER M., 1992; The Illustrated Burra Charter, Making good decisions about the care of important places; Australia ICOMOS Inc, Sydney.

MATTHEWS, W.L., 1975; A Probable Landslip at Stanley, Technical Report Number 19; Tasmania Department of Mines, Hobart.


Personal Communications cited in the text:

Nigel Brothers, Wildlife Management Officer, Marine Ecosystems, Nature Conservation Branch, DPIWE

Nick Mooney, Wildlife Biologist, Fauna Section, Nature Conservation Branch, DPIWE

Robert Scott, Manager, The Nut Chairlift, Stanley

Irynej Skira, Wildlife Biologist, Marine Ecosystems, Nature Conservation Branch, DPIWE
### Appendix 1  Flora of The Nut State Reserve

This list is a compilation of Willis (1966) and De Rooy (1996) from Attwater and Thorpe 1998.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Endemic to Tasmania</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Introduced and naturalised in Tasmania</td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>Listed in the Schedules of the Threatened Species Protection Act 1995</td>
<td></td>
</tr>
</tbody>
</table>

**DICOTYLEDONAE**

- **Acacia melanoxylon**  
  Blackwood
- **Acacia verticillata var. ovoidea**  
  Prickly Mimosa, Echidna Wattle
- **Acaena nova-zelandiae**  
  Buzzy, Biddy-widdy
- **Acaena ovina var. velutina**  
  Moore’s Alpine Fugitive
- **Actites megalocarpa**  
  Coastal Sow-Thistle
- **Alyxia buxifolia**  
  Sea-box
- **Anagallis arvensis**  
  Scarlet Pimpernel
- **Apium prostratum**  
  Sea Parsley
- **Astroloma humifusum**  
  Native Cranberry
- **Atriplex prostrata**  
  Creeping Saltbush
- **Banksia marginata**  
  Silver Banksia, Honeysuckle
- **Bossiaea prostrata**  
  Prickly Box, Blackthorn
- **Calandrina calyptrata**  
  Small-leaf Parakeelya, Pink Purslane
- **Cardamine gymnii**  
  Gunn’s Bittercress or Common Bittercress
- **Carduus tenuiflorus**  
  Slender Thistle
- **Cerastium tenuiflorum**  
  Mouse Ear Chickweed
- **Chenopodium glomeratum**  
  no common name found
- **Cirsium vulgare**  
  Thistle
- **Conium maculatum**  
  Hemlock
- **Coprosma quadrifida**  
  Prickly Currant Bush
- **Coprosma repens**  
  Mirror Bush
- **Correa alba**  
  White Correa, Native Fuschia
- **Crassula sieberiana**  
  Australian Stonecrop
- **Cyperus barbatus**  
  Australian Stonecrop
- **Cyathodes juniperina**  
  Pink or Crimson Berry
- **Daucus glochidiatus**  
  Australian Carrot
- **Delairea odorata**  
  Cape Ivy
- **Dichondra repens**  
  Kidney Weed
- **Diplarrena moraea**  
  White Flag Iris
- **Disphyma crassifolium**  
  Round-leaved Pigface
- **Elnadia nutans**  
  Climbing Saltbush
- **Elymus scaber**  
  Wild Rye
- **Epilobium billardierianum ssp cinereum**  
  Willow Herb
- **Eucalyptus viminalis**  
  Manna or White Gum
- **Fumaria officinalis**  
  Fumitory
- **Galium aparine**  
  Goose Grass, Cleavers
- **Galium australe**  
  Tangled Bedstraw
- **Galium gaudichaudii**  
  Rough Bedstraw
- **Genista monspessulana**  
  Broom
- **Geranium potentilloides**  
  Native Geranium
- **Glycine clandestina**  
  Native Soybean
- **Goodenia ovata**  
  Common Raspwort
- **Hedera helix**  
  Parrot’s Food, Hop Goodenia
- **Hydrocotyle hirta**  
  Ivy
- **Hypochoeris radicata**  
  Hairy Pennywort
- **Ilex aquifolium**  
  Cat’s Ear or Flatweed
- **Ilex aquifolium (I)**  
  Holly
- **Kennedia prostrata**  
  Running Postman
- **Leptorhynchos squamatus**  
  Scaly Buttons
- **Leucanthemum vulgare var tricolor**  
  Straw Daisy, Hoary Sunray, Grassland Gem
- **Leucopogon parviflorus**  
  Currant Bush, Coast Beard-heath
- **Lobelia alata**  
  Angled Lobelia
- **Lycium ferocissimum**  
  African Boxthorn
- **Marrubium vulgare**  
  Horehound
- **Medicago polymorpha**  
  no common name found
- **Medicago lupulina**  
  Black Medick
- **Melaleuca ericifolia**  
  Swamp Paperbark
- **Myoporum insulare**  
  Boobyalla
Olearia argophylla
Olearia phlogopappa
Opechandra varia
Oxalis perennans
Parasenianthes lopanthes (I)
Passiflora mollissima (I)
Pelargonium australe
Pinus radiata (I)
Psoralia pinnata (I)
Plantago coronopus (I)
Polyanthera microphylla
Pseudognaphalium luteo-album
Pultenaea daphnoides var. obcordata
Raphanus raphanistrum (I)
Rhagodia candelifera
Rorippa nasturtium-aquaticum (I)
Rubus parvifolius
Rumex spp
Sagina apetala
Sagina procumbens
Sambucus gaudichaudiana
Scleranthus bijlorus
Senecio hispidulus
Senecio lautus
Senecio linearifolius
Silybum marianum
Sonchus oleraceus (I)
Stellaria media (I)
Stellaria pungens
Trifolium dubium (I)
Trifolium tomentosum (I)
Trifolium repens (I)
Ulex europaeus (I)
Urtica incisa
Vicia hirsuta (I)
Vicia sativa (I)
Viola hederacea
Wahlenbergia gracilenta
Wahlenbergia gracilis

MONOCOTYLEDONAE
Agrostis billardieri
Agrostis capillaris (I)
Aira carophylla (I)
Aira praecox (I)
Anthericum odoratum (I)
Avena fatua (I)
Briza maxima (I)
Briza minor (I)
Bromus diandrus (I)
Bromus hordeaceus (I)
Bromus unioloides (I)
Bulbine bulbosa
Bulbine semibarbata
Carex appressa
Carex brevicaulis
Carpobrotus rossii
Centrolepis strigosa
Dactylis glomerata (I)
Danthonia pilosa
Dianella revoluta
Dichanthae crinita (I)
Distichlis distichophylla
Echinochloa ovata
Ehrharta stipoides
Festuca rubra (I)

Musk
Dusty Daisy Bush
Variable Stinkweed
Native Oxalis
Cape Wattle
Banana Passionfruit
Wild Geranium
Monterey Pine
Blue Butterfly Bush
Buckshorn Plantain
Four-leaved Allseed
Dogwood, Native Hazel
Small Poranthera
Jersey Cudweed
Native Daphne
Skellog
Coastal Saltbush
Nasturtium
Native Raspberry
Dock
Pearlwort
Native Elderberry
Knavel, Twin-flower Knavel
Hill Fireweed
Variable Groundsel
Fireweed, Fireweed Groundsel
Milk Thistle
Sow Thistle
Chickweed
Prickly Starwort
Clover
Hairy Clover
White Clover
Gorse
Nettle
Hairy Vetch
Vetch
Ivy-leaf Violet
Annual Bluebell
Australian Bluebell

Coast Blown Grass
Brown-top Bent Grass
Hair Grass
Sweet Vermal Grass
Wild Oats
Quaking Grass
Lesser Quaking Grass
Brome
Soft Brome
Prairie Grass
Bulbine Lily, Wild Onion
Leek Lily
Sedge
Sedge
Native Pigface
Bristlewort
Cocksfoot
Velvet Wallaby-grass
Spreading or Black-anther Flax-lily
Tall Plume Grass
Australian Salt-grass
Hedgehog Grass
Weeping Grass
Red Fescue
*Holcus lanatus* (I)  
*Hordeum myrinum* ssp *leporinum* (I)  
*Isolepis nodosa*  
*Juncus pallidus*  
*Lagurus ovatus* (I)  
*Lepidosperma gladiatum*  
*Lepidosperma latere*  
*Lolium perenne* (I)  
*Lomandra longifolia*  
*Luzula campestris*  
*Parapholis incurva* (I)  
*Poa labillardierei*  
*Poa rodwayi*  
*Sarcocornia quinqueflora*  
*Stipa flavescens*  
*Stipa stipoides*  
*Tetragonia implexicoma*  
*Themeda triandra*  
*Vulpia bromoides* (I)

**PTERIDOPHYTA**

*Adiantum aethiopicum*  
*Asplenium flabellifolium*  
*Asplenium obtusatum*  
*Blechnum minus*  
*Blechnum nudum*  
*Blechnum wattsii*  
*Cenopteris heterophylla*  
*Dicksonia antarctica*  
*Histiopteris incisa*  
*Hypolepis rugosula*  
*Microsorum pustulatum*  
*Polystichum proliferum*  
*Pteridium esculentum*  

Yorkshire Fog Grass  
Barley Grass  
Knobby or Knotty Club-rush  
Pale Rush  
Hare’s Tail, Bouquet Grass  
Coast Sword-sedge  
Variable or Broad Sword-sedge  
Perennial Ryegrass  
Sagg, Long or Spiny-headed Mat-rush  
no common name found  
Coast Barb Grass  
Tussock Grass  
Rodway’s Poa  
Beaded Glasswort  
none  
Coastal Spear-grass  
Ice-plant  
Kangaroo Grass  
Pescue  

Common Maidenhair  
Necklace Fern  
Shore Spleenwort  
Soft Water-Fern  
Fishbone Water-Fern  
Hard Water-Fern  
Gypsy Fern  
Tree Fern  
Bat’s Wing  
Ruddy Ground-Fern  
Kangaroo Fern  
Mother Shield-Fern  
Bracken
Currently, plants of the straw daisy *Leucochrysum albicans* in The Nut State Reserve appear to be quite old and there is little recruitment of seedlings into the population. Existing plants are threatened by competition from encroaching woody weeds and introduced grasses. The aim of management is to provide open areas which will act as suitable regeneration niches within the existing area occupied by the species as well as adjacent areas that have the potential to be occupied due to the wide dispersal capacity of the species.

Suitable regeneration niches can be provided by:
- removal of woody weeds and introduced grasses
- burning
- slashing

It is suggested that the area be divided into patches related to the density of woody weeds, introduced grasses and *Leucochrysum albicans*. A program of weed removal and burning can then be planned for the patches and implemented over several years to spread the risk of poor recruitment rates due to unfavourable environmental conditions following treatment.

Woody weeds are best treated by cutting and immediately painting cut stems with glyphosate. It would be preferable to burn some patches with woody weeds and a low density of *Leucochrysum albicans* in order to provide a larger area for recruitment. Areas infested with introduced grasses could be sprayed with a specific grass spray such as Fusilade. Adjacent areas acting as a source of weed seed for the patches will also need to be treated. Follow up treatments will be required for several years to eliminate weeds. Slashing is the least favoured option for providing regeneration niches in this population due to the difficulty and cost of regularly slashing slopes. Any slashing undertaken however should occur in autumn following seed set.

Successful recruitment can be enhanced by prior collection of seed from within patches or from adjacent patches for sowing into cleared areas especially following burning. Seed of *Leucochrysum albicans* loses viability within a few months of storage and all seed collected should be sown as soon as practicable following collection. Guidelines for the translocation of threatened plants in Australia (Australian Network for Plant Conservation 1997) should be adhered to.

Reference: Australian Network for Plant Conservation Translocation Working Group, 1997; Australian Network for Plant Conservation, Canberra
Appendix 3  Known Fauna of The Nut State Reserve

E = endemic to Tasmania
I = Introduced and naturalised in Tasmania
T = Listed in the Schedules of the Threatened Species Protection Act 1995

Terrestrial Mammals
Tachyglossus aculeatus setosus  Echidna
Isoodon obesulus affinis  Brown Bandicoot
Perameles gunnii  Eastern Barred Bandicoot
Pseudocheirus peregrinus viverrinus  Ringtail Possum
Trichosurus vulpecula fuliginosus  Brushtail Possum
Thylogale billardieri  Tasmanian Pademelon  E
Dasyurus maculatus maculatus  Spotted-tailed Quoll

Terrestrial reptiles
Austrelaps superbus  Copperhead
Notechis ater  Tiger Snake
Drysdalia coronoides  White-lipped Whipsnake

To be surveyed  Skinks (present in great variety and numbers)

Exotic And Feral Species
Mus musculus  House Mouse
Rattus rattus  Black Rat
Rattus norvegicus  Norway Rat
Oryctolagus cuniculus  Rabbit
Felis catus  Cat

Birds  (Note: Bird species names follow the taxonomy of Christidis & Boles 1994)
Coturnix ypsilophora  Brown Quail  possibly present
Eudyptula minor  Little Penguin
Pelecanoides urinatrix  Common Diving-petrel
Puffinus griseus  Sooty Shearwater
Puffinus tenuirostris  Short-tailed Shearwater
Diomedea cauta  Shy Albatross
Morus serrator  Australasian Gannet
Phalacrocorax melanoleucos  Little Pied Cormorant
Phalacrocorax fuscescens  Black-faced Cormorant
Phalacrocorax carbo  Great Cormorant
Haliaeetus leucogaster  White-bellied Sea-Eagle
Circus approximans  Swamp Harrier
Accipiter fasciatus  Brown Goshawk
Accipiter novaehollandiae  Grey Goshawk  on chairlift cable!
Aquila audax  Wedge-tailed Eagle  T
Falco berigora  Brown Falcon
Falco cenchroides cenchroides  Australian Kestrel  rare breeder in Tas
Falco peregrinus  Peregrine Falcon
Porphyrio porphyrio  Purple Swamphen
Gallinula mortierii  Tasmanian Native Hen
Gallinago hardwickii  Latham's Snipe
Haematopus longirostris  Pied Oystercatcher
Haematopus fuliginosus  Sooty Oystercatcher
Charadrius ruficapillus  Red-capped Plover
Charadrius bicinctus  Double-banded Plover
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinornis rubricollis</td>
<td>Hooded Plover</td>
</tr>
<tr>
<td>Vanellus miles</td>
<td>Masked Lapwing</td>
</tr>
<tr>
<td>Larus pacificus</td>
<td>Pacific Gull</td>
</tr>
<tr>
<td>Larus dominicanus</td>
<td>Kelp Gull</td>
</tr>
<tr>
<td>Larus novaehollandiae</td>
<td>Silver Gull</td>
</tr>
<tr>
<td>Calyptorhynchus funereus</td>
<td>Yellow-tailed Black Cockatoo</td>
</tr>
<tr>
<td>Platyccerus caledonicus</td>
<td>Green Rosella</td>
</tr>
<tr>
<td>Neophema chrysogaster</td>
<td>Orange-bellied Parrot</td>
</tr>
<tr>
<td>Neophema chrysostoma</td>
<td>Blue-winged Parrot</td>
</tr>
<tr>
<td>Chrysococcyx basalis</td>
<td>Horsfields Bronze-Cuckoo</td>
</tr>
<tr>
<td>Chrysococcyx lucidus</td>
<td>Shining Bronze-Cuckoo</td>
</tr>
<tr>
<td>Chrysococcyx osculans</td>
<td>Black-eared Cuckoo</td>
</tr>
<tr>
<td>Ninox novaeseelandiae</td>
<td>Southern Boobook</td>
</tr>
<tr>
<td>Tyto novaehollandiae</td>
<td>Masked Owl</td>
</tr>
<tr>
<td>Dacelo novaeguineae</td>
<td>Laughing Kookaburra</td>
</tr>
<tr>
<td>Malurus cyaneus</td>
<td>Superb Fairy-Wren</td>
</tr>
<tr>
<td>Anthochaera paradoxa</td>
<td>Yellow Wattlebird</td>
</tr>
<tr>
<td>Lichenostomus flavicollis</td>
<td>Yellow-throated Honeyeater</td>
</tr>
<tr>
<td>Melithreptus affinis</td>
<td>Black-headed Honeyeater</td>
</tr>
<tr>
<td>Phylidonyros pyrrhoptera</td>
<td>Crescent Honeyeater</td>
</tr>
<tr>
<td>Phylidonyros novaehollandiae</td>
<td>New Holland Honeyeater</td>
</tr>
<tr>
<td>Phylidonyris melanops</td>
<td>Tawny-crowned Honeyeater</td>
</tr>
<tr>
<td>Pardalotus striatus</td>
<td>Striated Pardalote</td>
</tr>
<tr>
<td>Acanthorhynchus tenuirostris</td>
<td>Eastern Spinebill</td>
</tr>
<tr>
<td>Petroica multicolor</td>
<td>Scarlet Robin</td>
</tr>
<tr>
<td>Petroica phoenicea</td>
<td>Flame Robin</td>
</tr>
<tr>
<td>Melanodryas vittata</td>
<td>Dusky Robin</td>
</tr>
<tr>
<td>Colluricincla harmonica</td>
<td>Grey Shrike-Thrush</td>
</tr>
<tr>
<td>Rhipidura fuliginosa</td>
<td>Grey Fantail</td>
</tr>
<tr>
<td>Cocacina novaehollandiae</td>
<td>Black-faced Cuckoo Shrike</td>
</tr>
<tr>
<td>Artamus cyanopterus</td>
<td>Dusky Wood Swallow</td>
</tr>
<tr>
<td>Cracticus torquatus</td>
<td>Grey Butcherbird</td>
</tr>
<tr>
<td>Strepera fuliginosa</td>
<td>Black Currawong</td>
</tr>
<tr>
<td>Corvus tasmanicus</td>
<td>Forest Raven</td>
</tr>
<tr>
<td>Alauda arvensis</td>
<td>Skylark</td>
</tr>
<tr>
<td>Passer domesticus</td>
<td>House Sparrow</td>
</tr>
<tr>
<td>Stagonopleura bella</td>
<td>Beautiful Firetail</td>
</tr>
<tr>
<td>Carduelis carduelis</td>
<td>European Goldfinch</td>
</tr>
<tr>
<td>Hirundo neoxena</td>
<td>Welcome Swallow</td>
</tr>
<tr>
<td>Zosterops lateralis</td>
<td>Silvereye</td>
</tr>
<tr>
<td>Turdus merula</td>
<td>Common Blackbird</td>
</tr>
<tr>
<td>Sturnus vulgaris</td>
<td>Common Starling</td>
</tr>
</tbody>
</table>
Appendix 4  Wildlife Viewing Guidelines

Excerpted from Wildlife Notesheets prepared by the Parks and Wildlife Service, Tasmania

These guidelines are intended to both protect wildlife and to allow you to see them under natural conditions. Please be sure you are familiar with them before visiting a penguin or sooty shearwater (muttonbird) colony.

Little Penguins (Eudyptula minor)

Left to themselves, penguins will start to leave the sea at last light so that they are under the cover of darkness, which helps to protect them from predators. At this time they are very vulnerable (remember they regard you as a potential predator) and hence are wary. If they sense a threat or are disturbed by torchlight or loud noise they stay at sea longer. This is stressful for them and can interfere with breeding, or may prevent them reaching their hungry young in the burrow. Besides, if they stay at sea, you may not see them at all.

Please read and observe any information signs that may be placed at the colony. Remember you need to wear dark clothing for camouflage and ensure you will remain warm. Approach your observation point from the land, preferably not by walking along the beach as this blocks the penguins’ access to their burrows. Use existing tracks and do not walk through the colony as it destroys burrows. Please do not damage vegetation.

Choose a viewing position that is at least three metres from their burrows, and away from their access routes. Choose a site that has a dark background to camouflage yourself. Settle comfortably before last light. If there are experienced personnel available, please take their advice. Remain quiet and keep movement to a minimum. Penguins have excellent vision and easily spot movement, especially if they see you outlined against the sky.

Only dim torches emitting a red light (red cellophane over the lens works well) should be used and then never toward the water or directly at the penguins. Flash cameras must not be used on the beach. Video cameras without spotlights can be used and produce better results at dusk than conventional cameras. Binoculars are useful, even at night.

Often the best place to view penguins is behind the beach where they feel more secure. Do not under any circumstances visit a colony with dogs (or cats). They are a major threat to penguins. Even if dogs are leased their smell remains to attract other dogs. Take your food scraps away as these also attract dogs and cats.

Muttonbirds

Viewing procedures are the same as for little penguins. Muttonbirds fly in to their colonies after dusk, land clumsily, and then make their way to their burrows. It is important to avoid trampling vegetation and walking in the colony as you can destroy their burrows, suffocating and/or injuring those inside.

Penguins and muttonbirds are protected wildlife on all land, including private land. It is illegal to catch, attempt to catch or otherwise harass penguins or muttonbirds without a permit from the Director, Parks and Wildlife. If this type of behaviour is observed, please report it to the nearest ranger. Offences are taken seriously.

Viewing native wildlife in their habitat is a remarkable experience for us all – let us keep it that way.
Appendix 5  Management of the Stanley Snail


STANLEY SNAIL
Miselaoma weldii (Punctidae)

Status
Tasmania's Threatened Species Protection Act 1995 - Vulnerable
Commonwealth Environment Protection and Biodiversity Conservation Act 1999 - not listed

Description
The family Punctidae is a widespread family in Australia and elsewhere, consisting of small to minute snails which generally have shiny, tightly coiled, and irregularly sculptured shells. Miselaoma weldii is immediately distinguishable by its sinistral (reversed) shell, which has its aperture on the opposite side to most land snails. Adult shells are up to 1.8 mm wide and 1.3 mm high, with a raised ('turbinately discoid') spire of 5.5 to 6.5 whorls. The umbilicus is very narrow. The shell is pale yellowish brown to greenish-brown, and translucent in living specimens or dead shells in good condition. The shell is shiny and relatively smooth with close small longitudinal striations. The animal is usually black or very dark slatey grey on top, and paler underneath. In live specimens, the animal is clearly visible through the base of the shell.

Distribution, Habitat and Biology
Within Tasmania, the Stanley snail Miselaoma weldii appears to be restricted to The Nut at Stanley. The snail is believed to have reached Tasmania from southern Victoria and is unlikely to have occurred more widely in north-western Tasmania. The Nut is a distinctive steep basalt hill, 147 m asl and about 100 ha in area. Of this, much has been cleared or otherwise degraded, and the snail is estimated to now only inhabit about 4 ha.

The Stanley snail occurs in three apparently discrete populations on The Nut. The largest, occupying about 3.5 ha, covers a continuous range of coastal shrubbery, woodland and dry scrub communities extending from the easternmost point of The Nut around for about 500 m to the north-west, and up from the coast to an altitude of about 120 m. The two smaller colonies are in gullies containing dogwood. One, of about 0.3 ha, extends from near the telecommunications hut on the west of The Nut down to a large patch of green ivy visible from the township. The other is a small patch of dogwood perched above the Stanley quarry and is estimated to cover about 0.2 ha.

Early paintings of The Nut suggest that many of the Stanley snail's previous sites were cleared for sheep grazing. It is suspected that sheep either overgrazed these areas (which have subsequently re-grown) or degraded and over-disturbed the leaf litter (a process which may be continuing) and therefore eliminated the species from much of its original area.

On the basis of Bonham's surveys, it is extremely unlikely that the Stanley snail occurs anywhere on the Circular Head peninsula other than The Nut. Habitats away from The Nut (between Rocky Cape and Smithton) were either too degraded for native snails, or they comprise assemblages of only extremely hardy 'coastal snail' species. Habitats surveyed along Tatnells Beach and Godfreys Beach appeared suitable for the species if it could tolerate substrates other than the basalt of The Nut. This absence suggests the species may not be capable of occupying generic coastal environments, and that accidental dispersal to a distant suitable site is required for it to become established - something which is unlikely given the species' small population.

On The Nut, the Stanley snail occurs in a wide range of vegetation types, including dogwood scrub, coastal shrubbery, dry open tea tree scrub, blackwood scrub, and low Eucalyptus viminalis woodland, this latter vegetation type appearing to be the most productive habitat. It is capable of tolerating some degree of weed intrusion, having been found alive in one very large ivy plant, and being capable of surviving where gorse is a major component of the leaf litter. It is absent from sites where weed intrusion is extensive, and also from some sites on the southern part of The Nut where weeds are scarcer but sheep disturbance may have played a role in the past.
Little is known of the life cycle of the species as very few juvenile specimens have ever been seen. K. Bonham suggests that the species grows to maturity rapidly and then remains in the adult phase for perhaps a year or two. Juvenile mortality appears extremely low for such a small snail. Diet appears to consist of small particles of detritus, including fallen leaves which settle in fine dirt and composting leaf litter, especially where this accumulates between shrubbery and rocks. The species does not occur in open rocky areas, which suggests that it has a moisture or cooling requirement and needs to be well covered by vegetative (not necessarily native) or deep rockpiles. Individuals are gregarious and cluster together or share the same niche with slightly larger snails, e.g. *Pernagera officeri*, and therefore have access to an excellent supply of calcium. *Prolesophanta dyeri* has been identified as a predator upon this species, but it is extremely rare in the Stanley snail's habitat. Other predators might include centipedes and spiders. As the Stanley snail is small, semi-gregarious and with limited dispersal mechanisms it is probably unable to rapidly re-populate an area once it has been exterminated.

**Key Site**
- Only known from The Nut, Stanley.

**Key Threats**
- Habitat degradation and loss due to continuing weed invasion (especially gorse and boxthorn).
- Fire anywhere throughout the species' range.
- Clearing of any native vegetation, including by stock grazing.
- Disturbance to rock piles or cliff face which provide shelter.

**Habitat Management and Other Ways to Help**
- Sites where the species is known to occur should not be cleared or subjected to increased fire risk. Please develop an active management plan centred around replacing native habitat in a mosaic pattern, enabling existing populations to remain until vegetation has established. Monitoring sites should be established to ensure population numbers are not adversely affected and are increasing over time.

- To slow the rate of weed invasion, isolated smaller patches and seedlings of gorse and boxthorn should be removed where practical from the north-eastern part of The Nut, in accessible areas below the cliffs and above the shoreline roughly between the points GR3571 4859 and GR 3567 4863. Please seek advice on the most appropriate and effective methods for weed removal.

- Any invading gorse seedlings near the top part of gully near the telecommunications hut (GR 3564 4859) should be removed regularly. Gorse should not be removed from the bottom part of the gully or from the gully at GR 3567 4856 as this may cause excessive surface disturbance or lead to drying out of the area.

- Invasive and dominating weeds should be kept out of areas where the species occurs. Boxthorn and gorse are particularly bad. Where these weeds occur at a low density in these areas, they should be removed where practical and safe.

- The large ivy growing on the southern wall of The Nut (clearly visible from Stanley) should not be removed as it has become a large refuge for snails.

- Please become familiar with identification of this species as more surveys are always needed in areas other than The Nut.

**More Information**

1: 25 000 TASMAP sheets with known sites and potential habitat

[Illustration from Smith and Kershaw 1981]
Appendix 6  Tasmanian Historic Places Inventory Reports

Place Name  'The Green House'  

<table>
<thead>
<tr>
<th>Recorder Details</th>
<th>THPI No. 7916.003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recorder: R Morrison</td>
<td>Section A: Place Summary</td>
</tr>
<tr>
<td>Date recorded: 13/05/1988</td>
<td>Field book: n/a</td>
</tr>
<tr>
<td>Field no: n/a</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basic Record Details</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Place type: (Infrastructure) Communication, Other</td>
<td>Site width: n/k</td>
</tr>
<tr>
<td>Complex type: Place simple</td>
<td>Site length: n/k</td>
</tr>
<tr>
<td>Present use: Community Services</td>
<td></td>
</tr>
</tbody>
</table>

Description: Part weatherboard, part corrugated iron building that was the radio transmission hut for communication between Tasmania and Victoria from 1941 to 1966.

Summary: In 1937, the Nut became part of the first microwave experiments between Tasmania and Victoria. Tasmanian transmitting and receiving arrays were built on the Nut, and a decision was soon made to install radio telephone channels after successful testing. It has been said that an initial catalyst for the experimentation was fear of the enemy serving the Perkins Bay cable during World War II. The full radio link operated from 6 November 1941. This was located in the 'Green House'. The Nut's associations with Bass Strait telecommunications ended after radio links were established between Victoria and Launceston via Flinders Island.

The 'Green House' is now subject to lease from the Parks Service, for operation as a kiosk and tearooms for five years from 27 August 1982, with an option of a further five years. The lease holder has partly refurbished the old building, which he took over in a run-down, vandalised state. New public toilets are accessible to the public at large. Under terms of the lease, a weekly rental and a percentage of the takings are payable to the Crown, any refurbishing of the 'Green House' is to be at the lease holder's expense.

Address / location

Map: 3448 STANLEY  
Address/Location: The Green House  
Nut State Reserve  
Stanley Tasmania  
Access policy: PWS-Northern Region
PWS-North West District  
Area: Tenure-State Reserve  
How to get there: The 'Green House' is located opposite the car park near the base of the walking track to the Nut's summit. It is accessible by vehicle.

Features

<table>
<thead>
<tr>
<th>Feature Number</th>
<th>Feature Name</th>
<th>Feature type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Other Structure</td>
<td>Structure (Shelter)</td>
</tr>
</tbody>
</table>

Condition and Threats

Condition: Functional, intact  
Integrity: Structurally stable, complete

Comments on condition:

Threat: Cultural, development  
Rating: Unknown
Comment: The place is used for a purpose other than conservation, and an investigation of the impacts of this use needs to be undertaken.

Threat: Cultural, lack of maintenance  
Rating: Moderate
Comment: A maintenance regime does not appear to be in place for the site.

History

Background comments:

Themes:
Place Name: 'The Green House'  

THPI No.: 7916.003  

Section A: Place Summary

History (Stage/Year)  
Construction: From 1941  
Description: Constructed as radio transmission hut.

Use: From 1941 To: 1966  
Description: Used as radio transmission hut.

Disuse: From 1966 To: 1982  
Description:

Use: From 1982 To: 1996  
Description: Used as kiosk and tearooms for people visiting The Nut

Listings
Listing:  
File number:

Significance
Informal Significance Assessment:
Preliminary rating:  
Final rating: Not assessed  
Rating Comments: The suggested significance of the place is based on anecdotal information only. A thorough understanding of the value of the place needs to be determined.

Informal statement of significance:  
Community associations: Not known.

Formal Significance Assessment:

Significance criteria
Assessment of Significance

Section B: Management Objectives

Management objectives
Further assessment

Comments
The appropriate management regime for the place needs to be decided upon and activated. It would appear from discussions with Chris Arthur, Senior Ranger Stanley, that the structure has a variety of values and should be actively managed.

Note that lease issues should also be investigated.

Actions: Place & Features
PLACE: 'The Green House'
Action type: Undertake preliminary physical inspection
Responsibility: B. Noble
Date Due: 7/1/00
Date Completed:  
Repeat Every: not repeated
Estimated cost: $0.00
Action Description: Very little specific structural information is known about the place. A thorough record of the place is needed, together with establishment of a cyclical maintenance regime.
The Nut State Reserve Management Plan 2003

Place Name  PMG Lineyard, Stanley

THPI No.  7916.037

Section A: Place Summary

Recorder Details
Recorder: B Noble
Date recorded: 11/02/1999  Field book: n/a  Field no: n/a

Basic Record Details
Place type: (Community Services) Government, Postal Services  Site width: 50m  Site length: 50m
Complex type: Place simple
Present use: Community Services

Description: The PMG (Post Master General) Lineyard consists of several timber and corrugated iron workshop structures, forming a small yard.

Summary: The Lineyard is associated with the early (c.1935) telecommunications cable at Stanley. It was developed in the late 1930s as a storage facility for telephone equipment and lines, as well as a workshop for maintaining vehicles. It fulfilled this role until 1966. Since that time it was used by Council as a storage depot and maintenance yard until 1993. The buildings have not been used or maintained since 1993.

Address / location
Map: 7916 CIRCULAR HEAD  Location X: 356272  Y: 5486289
Address/Location: PMG Lineyard
Browns Road
Stanley TAS 7331
Access policy: Notify management authority
PWS-North West District
PWS-Northern Region
Area: Tenure-State Reserve

How to get there: The site is accessible by vehicle along Browns Road. It is adjacent to the Stanley Burial Ground, at the base of the north western end of The Nut.

Features
Feature Number  Feature Name  Feature type
1  Workshop  Structure (Shelter)
2  Workshop  Structure (Shelter)
3  Garage  Structure (Shelter)
4  Garage  Structure (Shelter)

Condition and Threats
Condition: Functional, intact
Integrity: Structurally stable, complete

Comments on condition:

Threat: Cultural, development  Rating: High
Comment: A proposal has been recieved to demolish the structures and rehabilitate the area.

History
Background comments:

Themes:

History (Stage/Year)  Phase:

Description:
Section A: Place Summary

**Place Name**  
*PMG Lineyard, Stanley*

**THPI No.**  
7916 937

**Listings**

**Listing:**

**File number:**

**Significance**

**Informal Significance Assessment:**

**Preliminary rating:** Demonstrates to a minimal degree: Historical development

**Final rating:** Demonstrates to a minimal degree: Historical development

**Rating Comments:**

The main features of the place are not considered to be of substantial cultural significance. The site is associated with facets of early telecommunications activities in the area, but the features present do not contribute to a demonstration of this activity.

**Informal statement of significance:**

**Community associations:**

**Formal Significance Assessment:**

**Formal statement of significance:**

**Significance criteria**

**Assessment of Significance**

---

Section B: Management Objectives

**Place Name**  
*PMG Lineyard, Stanley*

**THPI No.**  
7916.037

**Management Objectives**

**Comments**

Benign neglect  
Features at the place are unlikely to warrant a special cultural heritage maintenance regime or conservation activities.

**Actions: Place & Features**

**PLACE:**  
PMG Lineyard, Stanley

**Action type:** Undertake detailed physical inspection

**Responsibility:** Noble, B.

**Date Due:** 4/30/99

**Date Completed:** Repeat Every: not repeated

**Estimated cost:** $ 0.00

**Action Description:** Establish a record of the principal features of the place.

**Action Comments:**

The need for a physical record of the place has been prompted by a request to remove the features of the place. (See district PPF NS69, and file 50 223.31.)
Appendix 7  Gorse Spider Mite

The following is the text of Biological Control Pamphlet Number 5 (1999), an information bulletin published by the Tasmanian Institute of Agricultural Research, University of Tasmania and the Department of Primary Industries, Water and Environment. ISBN 1862950180.

Background

Gorse is one of the most serious agricultural and environmental weeds in Tasmania. Because of its invasiveness and the difficulty and expense of controlling it by conventional methods it is seriously affecting the resilience and sustainability of the land on which it is established. It is of particular concern in agricultural areas, riparian environments and in disturbed areas of bushland. Infestations occur on rural land in all parts of Tasmania. The heaviest infestations covering about 30,000 hectares occur in the central and northern Midlands on pastures grazed mainly by sheep. In these areas alone, losses in animal production are currently estimated at about one million dollars per annum.

Biological control offers a long term solution to the gorse problem and the chance of returning land to sustainable and productive use through an environmentally friendly control system. The possibility of a biological control for gorse is not new and began with the introduction of the gorse seed weevil from England. The weevil was released in New Zealand in 1931 and in Tasmania and Victoria around 1939. Although now widespread, it has had no appreciable effect on gorse as it only attacks the spring crop of seeds, with the autumn crop being completely unaffected.

Several other biological control agents that attack gorse in their native environment of Europe have since been introduced into New Zealand and the United States. These include the gorse spider mite *Tetranychus lintearius* Dufour, which is the most damaging agent on gorse in Europe.

The gorse spider mite, which was found to attack only gorse, was originally imported into New Zealand from England in 1988. It was first released in New Zealand in 1989 and is now widespread. Gorse spider mite was reassessed for its host specificity to make certain that it will only attack gorse if released in Tasmania or elsewhere in Australia. As a result of these tests, the mite was imported into Tasmania and Victoria in spring 1998 to enable mass rearing programs to commence in these States. Field releases are planned over the next 2-3 years in an attempt to establish the mite at selected sites in all regions where there is a problem. Redistribution programs involving Landcare groups will then be carried out to accelerate its rate of spread.

Description

Gorse spider mites range in size from about 0.4 to 0.6 mm in body length (smaller than a pin head). Immature mites have green abdomens with mouthparts and legs ranging from orange to yellow. On maturing the body reddens often with a dark spot on either side of the abdomen.

Biology

Gorse spider mite forms discrete, long lived colonies which live in a tent-like white web and move around the host plant en masse feeding and web spinning as they go. These colonies feed on mature gorse foliage.

The life cycle is temperature dependant and takes about 46 days at 15°C, about 32 days at 20°C and 20 days at 23°C. Because it is able to pass through several generations in a relatively short time at warmer temperatures it can quickly build up in large numbers. The mites pass through six immature stages before the adult stage is reached. Adults may feed from one to two weeks before the female starts egg laying. Eggs, which are brownish when mature, are scattered through the silk webbing of the colony and hatch in one to two weeks under warm conditions. In summer, each female lays about 40-50 eggs at the rate of one per day to a maximum of four per day, depending on temperature. The sex ratio is one male for every 20 females, although this can vary considerably. Climatic conditions, particularly rainfall, have a direct impact on the establishment and population growth of the mites. On warm days they can be seen moving actively through their webbing, however, on cold or wet days they protect themselves by clustering at the...
centre of the web, often on the leeward side of the gorse stems.

**Damage to gorse**

Gorse spider mites have sucking mouthparts with jaws like hypodermic syringes that pierce the plant cell wall and extract the cell contents. This ultimately results in the foliage having a bleached or bronzed appearance. Mite feeding can significantly reduce the green weight of a gorse bush and can reduce flowering and retard growth.

**Prospects for control**

It is expected that the gorse spider mite will be one of several agents that will be required to collectively reduce the vigour of gorse. Plans are underway to introduce other agents into Australia once tests are completed to ensure that they attack only gorse. These agents are the gorse thrips, *Sericothrips staphylinus* Haliday and the gorse soft shoot moth *Agonopterix ulicetella* (Stainton) which destroys the seed. If these agents can also be established, their effects will complement those of the gorse spider mite and the already established gorse weevil.

It is important to remember that biological control will not eradicate gorse but it is hoped that the combined impact of complementary agents could significantly reduce plant vigour, making gorse more susceptible to grazing, weather stresses and herbicides.

Vigour reduction of gorse would enable beneficial plant species to compete with it more readily resulting in a substantial increase in pasture and animal productivity in agricultural areas. The control of existing gorse stands would become economic and gorse regeneration in existing or renovated pasture or conservation areas would be retarded or cease. The spread of gorse would also be restricted due to a greatly reduced seed output. There will also be a reduction in the use of gorse as a habitat for vertebrate pests, and it will be reduced as a fire hazard.

For further information on this project, contact:

John Ireson  
Tasmanian Institute of Agricultural Research  
13 St Johns Avenue, New Town 7008  
Phone (03) 6233-6821  
Fax (03)6278-2716  
Email John.Ireson@dpiwe.tas.gov.au

Funding support for this project is being provided by the Natural Heritage Trust.
Appendix 8  Introduced Plants Policy

Parks and Wildlife Service

Preamble

Introduced plant species are defined as all plant species that occur outside the natural range of the species, including Australian native species or genotypes. For the purposes of this policy, fungi are also included as plants. Introduced plant species may provide important agricultural, horticultural or cultural value to the State. Some introduced plant species, including a number with beneficial values, behave as weeds causing detrimental economic or environmental effects. Where these species can invade native vegetation, altering ecological processes, these are termed environmental weeds.

The Tasmanian naturalised plant flora is steadily increasing and currently comprises 31% of the flora, the highest proportion for all Australian States. The scope and impact of the Tasmanian environmental weed problem is poorly documented, but it is clear that environmental weeds are a major concern to the community and land managers.

Introduced plants may have a negative impact on economic, cultural, environmental or aesthetic values. Environmental impacts that may be caused by introduced plant species include:

- floristic and structural changes in native plant communities,
- secondary impacts such as altered fire regimes,
- changes to geomorphology through the stabilisation or degradation of landforms,
- changes to hydrology through altered flow and sedimentation,
- exotic diseases may spread from introduced plants to susceptible native species,
- hybridisation and other genetic modification of native plants may occur with the introduction of closely related native species,
- changes in faunal populations of an area through change in food or habitat. (In some cases this may be a positive benefit (eg. gorse may provide shelter for eastern barred bandicoots).

However introduced plants may have important positive attributes, eg. food. Also the aesthetic values of introduced plants may be important in some situations. Conversely the presence of introduced plants may reduce the aesthetic values of landscapes, for example in wilderness areas. Ornamental and functional planting of introduced species may be required for stabilisation or rehabilitation and for public amenity in visitor service zones and residential areas within land managed by Parks and Wildlife Service (PWS).

Introduced plants may also have significant cultural value relating to the later post aboriginal settlement of Tasmania. The PWS has a legislative responsibility to protect such plants. These plants may be significant for their contribution to the structure of a historic site or the site may derive its cultural significance primarily from the importance of its associated plants. Plants may also be important for their scientific or historical interest ie. specimens of rare or old fashioned plant varieties. Management conflicts may arise where an introduced plant of cultural significance is causing significant environmental impact or has the potential to do so. Procedures must be established which can resolve the conflict between environmental and cultural values.

All control measures must take into account off-target impacts. In some situations introduced plants may benefit some native plant or animal species and control programs should address such examples on a case by case basis. Other ecological considerations may also place restrictions on management options.

WeedPlan, the Tasmanian Weed Management Strategy, establishes community ownership, mutual recognition and co-operation as the basis for a regional, community-based approach to weed management in Tasmania. WeedPlan defines a weed as a “plant growing where it is not wanted”. The Weed Management Act 1999 supports this new approach and replaces the Noxious Weeds Act (1974). Such cooperative and community based approaches are likely to provide the greatest level of control of environmental weeds in the most cost effective way. PWS priorities are also governed by obligations under the Threatened Species Protection Act (1995) which identifies biodiversity threats resulting from introduced plants as a management priority, and the National Strategy for the Conservation of Australia’s Biological Diversity.
Eradication will seldom be possible. Control measures are generally applied in accordance with the level of threat and management capacity. Control strategies that may be applied include the protection of areas free of environmental weed infestation, management of zones of spread i.e. roadsides and waterways, and management of major infestations. Eradication of environmental weeds may need to be followed up by rehabilitation of affected areas.

The policy is presented in two parts, part A - covering the management of introduced plants that are considered weeds and part B - covering the management of introduced plants with cultural heritage value.

Part A - Weeds

Objectives:

• Prevent or minimise the spread of weeds in accordance with specified statutory obligations.
• Prevent or minimise the invasion of native plant communities and habitats by environmental weeds.
• Maximise the protection of both natural and cultural values where conflict over the management of an introduced plant occurs.

Performance indicators:

1. Number of naturalised introduced plant species.
2. Reduction in area affected by environmental weeds of State significance.
3. Reduction in number of sites of botanical significance (threatened species/communities) affected by environmental weed invasion.
4. Reduction in the number of new environmental weed invasion sites (generally and associated with PWS operations).

1. Weed Control

1.1 Priorities applying to the control of environmental weeds threatening biodiversity.

1) Protection of natural values. Reduce or eliminate the threat to Tasmanian biodiversity and geoheritage caused by environmental weeds. Management priority will be given to:
   ii) Weeds affecting threatened plant communities and other significant botanical, zoological or geological assets.
   iii) Weeds invading significant areas of native vegetation that are free, or relatively free, of environmental weeds.

2) Address potential threats. To identify and control or eradicate serious environmental weeds, or those likely to become so, that are currently restricted in distribution or population.

3) Minimise susceptibility. Use an ecosystem management approach to control environmental weeds that are widely distributed. Management will be based on maintaining natural ecosystem processes and minimising disturbances such as soil disturbance, eutrophication and/or excessive burning. Management will apply basic hygiene to high risk activities (eg. road maintenance) which result in the spread of introduced plants and will use appropriate biological control methods.

1.2 Priorities applying to weeds that are not a threat to biodiversity:

1) Where weeds are listed for control under State legislation or state control strategies, these will be managed in accordance with legislation. Priority will be given to programs where these weeds directly affect neighbours or where co-operative community control programs are in place.

2) Introduced plants that cause loss of amenity value will be managed where public use of recreational areas is significantly affected or where there is significant loss of landscape values at important scenic sites.

1.3 The allocation of resources across the control priorities will be determined through the development of district weed management plans.

1.4 Five year control programs for weeds in each PWS District will be introduced, including documentation of control actions and evaluation of results.
1.5 PWS weed programs will be integrated with Regional Weed Management strategies where these are in place.

1.6 Ensure compliance with occupational health & safety standards and industry standard skill accreditation requirements in all aspects of weed management.

1.7 Control techniques will be prescribed with consideration for off target impacts, practicality and costs.

1.8 All aerial spraying programs shall be subject to drift monitoring, and if adjacent to water courses, water quality monitoring.

1.9 Where culturally significant plants or plant species are known environmental weeds, an assessment of both the invasiveness of the plant or plant species and an assessment of cultural significance should be undertaken using recognised methodologies for resolution of management.

2. Management Systems

2.1 A system for monitoring and recording introduced species will be developed on an appropriate GIS and textural database system and made available at the field level. Control programs shall be documented in a standard reporting format.

2.2 Preventative measures at the national and state level will be addressed through co-operation and liaison with the Australian Quarantine and Inspection Service (AQIS) and the Department of Primary Industry and Fisheries (DPIF), and other agencies, industry and community organisations as required.

2.3 Community partnerships in weed management programs will be encouraged and Districts are to participate in regional weed strategies.

2.4 Statutory management plans will address management of introduced plant species with reference to PWS District priorities.

3. Research

3.1 Research will support and facilitate the safe, environmentally responsible and effective implementation of weed control programs required under this strategy.
4. Education

4.1 General weed education programs will address prevention of weed problems. Specific programs will target local communities where co-operative control measures are required. Existing education services eg. summer ranger programs are to be used where possible to maintain an integrated education approach.

4.2 Internal PWS education and training program will be run through weed workshops in the development of weed management priorities and programs in PWS Districts.

Part B - Management of culturally significant introduced plants

Objectives:

- Prevent loss of culturally significant introduced plant varieties.
- Protect culturally significant introduced plants as part of the fabric of historic cultural heritage places.
- Maximise the protection of both natural and cultural values where conflict over the management of an introduced plant occurs.
- Research the value of these plants.

1. Protection

1.1 Develop management programs to protect and maintain identified culturally significant introduced plants or gardens.
1.2 Produce statements of cultural significance for introduced plants in historic sites where these plants are identified as an environmental weed threat.

1.3 Where culturally significant plants or plant species are known environmental weeds, an assessment of both the invasiveness of the plant or plant species and an assessment of cultural significance should be undertaken using recognised methodologies for resolution of management. See attachment 2 for a process for resolving cultural/environmental conflict.

2. Management Systems

2.1 Where introduced species are present at historic sites, these shall be recorded in the Tasmanian Historic Places Index (THPI) and their cultural significance or potential significance flagged.

2.2 Statutory and non statutory management plans will address the protection of culturally significant introduced plants and their interpretation as part of the presentation of sites to the public.

2.3 Culturally significant individual introduced plants and gardens will be maintained and presented to the public as part of the fabric of a historic place.

3. Research

3.1 Research priorities will address the identification and significance assessment of introduced plants and gardens.

4. Education

4.1 Internal and public weed education programs will include information on the cultural values and management of introduced plants in natural areas.
Appendix 9  Weed Management Recommendations

drafted from
The Nut State Reserve Draft Vegetation Management Plan
November 1995
by
Stuart Dudgeon and Louise Gilfedder
Parks and Wildlife Service
Department of Environment and Land Management
PO Box 44A, Hobart 7001

Vegetation of The Nut

Little information is available on the original vegetation of The Nut, but it is likely that it was vegetated in wet sclerophyll forest and open woodlands. Grassy vegetation and scrub was probably confined to steep slopes and cliff ledges. The Nut is today virtually treeless, with the exception of stunted white gums associated with the cliffs, and trees established in the 1980’s as part of an experimental planting. However, early descriptions of The Nut describe a forested landscape. Mrs. Rosalie Hare recorded in her diary in 1828 that there ‘were plenty of trees, but they were of stringey-Bark, so called from their bark continually falling off and hanging in strips’ (cited in Willis 1966). This may refer to browntop stringybark *Eucalyptus obliqua*, although its bark does not hang in strips. It could also refer to white gum *E. viminalis*, swamp gum *E. regnans*, or black gum *E. ovata*. More research is required to determine the previous dominant species of trees. Even in the late 1870s the summit of The Nut is described as ‘several acres of good land covered in timber’ (Whitworth 1879 in Willis 1966). Many of the houses in the township of Stanley are apparently constructed from local timbers, including blackwood *Acacia melanoxylon*. Willis (1966) postulates that the summit area may have been *E. viminalis* woodland.

The summit area is currently tussock grass *Poa labillardierei* tussock grassland, with a high degree of invasion by exotic species, including Yorkshire fog-grass *Holcus lanatus*, thistles *Cirsium* spp., *Carduus* spp., *Silybum marinum* etc. However, the nationally endangered straw daisy *Leucochrysum albicans* is an important component of this community, occurring on cliff edges on the northern and eastern faces of The Nut. The slopes of The Nut are vegetated in kangaroo grass *Themeda triandra* tussock grassland and sagg *Lomandra longifolia* sedgeland. Peas such as running postman *Kennedia prostrata* and native soybean *Glycine clandestina* and other colourful herbs occur in these communities. The vegetation in these communities is relatively intact, with only some areas invaded by gorse. Similarly the white gum woodlands on the steep slopes are also relatively gorse-free. These plant communities are an important seed source for rehabilitating areas where gorse has been removed.

Much of the original vegetation of The Nut has been reduced to areas dominated by tussock grass with an intertussock flora largely composed of exotic pasture grasses and weeds, and the slopes are dominated by a dense cover of gorse. Gorse and other woody weeds cover approximately 30% of the total area of the State reserve. Remnant coastal white gum woodland survives on steep scarps and cliff ledges.

Management Issues

Weed control and fuel reduction are the principal vegetation management issues impacting on the native vegetation.

Gorse Removal

The spread of gorse into the native vegetation has seriously reduced the integrity of the native vegetation, and its removal will greatly enhance the biological values of the reserve. The preferred removal technique is cutting the gorse, with subsequent poisoning with glyphosate. In some areas of thick infestation where cutting of bushes is difficult, burning the gorse first will facilitate its removal.

Gorse and other woody weeds occurring in the reserve are to be eradicated using the following principles:
• Work from areas of least infestation to areas of high infestation, or areas that are largely vegetated in native species to areas that are largely exotic (Bradley 1988, Buchanan 1989).

• Prioritise areas with small infestations that are relatively gorse-free at present (e.g., slopes or areas that have potential to become a propagule source for other areas, such as the gorse fringing the cliff tops).

• Minimise soil disturbance (see Bradley 1988 and Buchanan 1989), particularly in native plant communities and in a manner that doesn’t adversely affect soil stability.

• Divide infestations up into manageable units so that achievable goals can be tackled.

• Help long-term weed control through planting and promoting the growth of native species.

• In vegetation that is largely native, allow native species regeneration to dictate the rate of weed control (see Bradley 1988 and Buchanan 1989).

• On steeper slopes where gorse is dense, some form of soil stabilisation may be required. Mulches may be best initially to help stabilise soils and suppress weeds. Logs placed on the slope may be useful. Sterile exotic grasses such as ryecorn may also be useful to gain soil stability in the initial phases following gorse removal.

Priorities for Reducing Gorse Infestation

**Highest priority** for clearing to reduce infestation:

• A strip on the cliff edge running from the tree trial area to the chairlift.
• A small infestation on the eastern face of The Nut.
• Light infestations from the chairlift on the summit running to the shearwater colony lookout.

**Secondary priority** for clearing to reduce infestation:

• Blocks within the circuit walking track around the summit.
• Slope infestations running from the ascent walking track to below the Stanley Lookout (the most visible to visitors and residents of Stanley).
• Slope infestations from the ascent walking track around the northern face of The Nut to reduce the fire risk to Stanley.

**Lower priority** for clearing to reduce infestation:

• Heavy infestation on the slopes above the disused quarry.
• Patches of heavily infested areas between the two fire trails on the western side of The Nut to reduce the fire risk to Stanley.

Priorities for Gorse Clearing to Reduce Fire Risk to Stanley:

• The heavily infested areas between the two fire trails on the western side of The Nut above the town.
• The infestations from the ascent walking track around the northern face of The Nut.

Revegetation Program

Seed and propagation material should be collected from native indigenous species from the reserve. Where propagation material is not available, it should be collected from remnant vegetation within the same region, preferably the same catchment, and from the same vegetation and soil type. Ralph (1994a, 1994b) provides a guide for seed collection and germination.

Priorities for Revegetation
The priority for replanting is the sheltered area on the southern section of The Nut summit. Other areas are the northern area of the summit and the slopes close to the chairlift which are visible from Stanley. The lower, flatter areas of the reserve could also be fenced and planted.

References


Appendix 10  Draft Site Planning Guidelines

In preparing a site plan for development or redevelopment of any land reserved under the National Parks and Reserves Management Act 2002, the following must be taken into account, described and documented as outlined. The site plan will include all relevant information listed below and any further information that is necessary for the Director to make an informed decision on the development or redevelopment proposal and to submit as a Development Application to Council.

Title Page, Author, Date

Introduction
The introduction should cover the following points:
- the rationale and need for the proposal
- objectives of the proposal
- implementation timeframe, development phases and project life
- anticipated establishment costs
- likely markets for the product
- possibilities for future expansion
- the relationship between the proposal and other developments/businesses/similar facilities in the area and the consequences of not proceeding
- assessment and approvals process
- how the proposal complies with any legislation, statutory management plans, environmental standards and guidelines (including State Policies, Regulations and Codes of Practice)
- details of the nature and the results of public consultation undertaken (during preparation of the site plan and release of the site plan for public comment for minimum 30 days)

The Existing Environment
Plans/maps and accompanying text must be provided at a scale that effectively illustrates the following details:
- Land tenure and boundaries, easements, road reservations, rights of way, covenants
- Surface topography (10m contours) and drainage
- Significant features or landmarks
- Existing buildings, facilities, structures, pipelines, etc
- Local planning scheme zoning and any special planning controls that could apply
- Surrounding land use
- Access (roads, parking, bus turning provisions, disabled access)

Environmental Aspects
- Description of local topography, geography, geology, hydrology, soils, drainage
- Aboriginal and non-Aboriginal sites of archaeological and cultural heritage significance which may be affected by the project or infrastructure directly resulting from the project (provide summaries of statements of significance)
- Description of biological characteristics (flora, fauna, ecological communities)
- Any rare or threatened species listed under the Commonwealth Endangered Species Protection Act 1992 and/or the Tasmanian Threatened Species Protection Act 1995, which may be affected by the project
- Any identified areas or habitats of conservation significance, including designated conservation areas or areas relating to the requirements of international treaties (e.g., Ramsar (wetlands) Convention)
- A description of natural processes (fire, flooding) important for the maintenance of existing environment
- Information of species, sites or areas of landscape, aesthetic, wilderness, scientific or otherwise special conservation significance which may be affected by the project
- Places listed or interim listed on the Register of the National Estate
- Places listed on the Tasmanian Heritage Register, which may be affected by the project
- Existing utility services (e.g., electricity, water) and the availability and capacity of these services
- Transport infrastructure and use in the vicinity of the site
• A description of the existing visual characteristics of the site and an assessment of the vulnerability of
  the site to natural risks (e.g., flooding, winds, fire, etc)

**Business/Economic Aspects**
• For commercial projects, provide three year business and economic plan, long term economic viability
  projections
• Long range maintenance and risk management program

**Socio-economic Aspects**
A summary of the social/demographic characteristics of the population living in the vicinity of the project
site
• A summary of the characteristics of the local and regional economy (e.g., existing employment trends,
  land values)
• Community attitudes to the project
• Total capital investment for the project
• Employment opportunities and extent to which employees will be sourced locally
• Extent to which raw materials and related services will be sourced locally
• Monitoring and evaluation program to identify effects on employment, environmental compliance,
  community benefit, increased tourism, etc.

**Alternative Sites/Proposals**
• Describe the process and site selection methodology used
• Include details of alternative sites/proposals considered, including the no development option and the
  environmental technical, social, commercial and other criteria influencing selection
• Justification should be provided for the preferred option and rejecting the alternatives considered

**Development Proposal**
• A detailed description of the project. Diagrams and plans/maps should be used where appropriate.
  Detailed technical information should be included in appendices.
• A timetable for construction of the project
• Hazardous materials and waste management (e.g., asbestos) during construction and operation
• Alternative technologies, particularly energy-saving techniques during construction and operation
• Requirements for parking, road upgrading. Estimate number of vehicle movements during
  construction phase and operational phase
• Water and electricity supply requirements during construction and operation
• Hours of operation during construction and upon completion

**Summary of Commitments and Conclusion**
Appendix 11  National Estate Listing Statement

Australian Heritage Commission
Register of the National Estate Database
The Nut State Reserve, Stanley TAS

Class: Natural
Legal Status: Registered 21/03/1978
Database Number: 012006
File Number: 6/02/031/0002

Statement of Significance: The Nut has been described as the most prominent and dramatic landmark on the northern coast of Tasmania, and is of outstanding geological interest. It is also significant for its Short-tailed Shearwater (or Muttonbird; PUFFINUS TENUIROSTRIS) rookeries, and for providing habitat for migratory and breeding birds, including the rare Orange-bellied Parrot (NEOPHEMA CHRYSOGASTER), Nankeen Kestrel (FALCO CENCHROIDES), Peregrine Falcon (FALCO PEREGRINUS), and Little Penguin (EUDYPTULA MINOR).

Description: The Nut State Reserve occupies much of the distinctive headland named Circular Head near the town of Stanley in north-west Tasmania. The Nut is a visually significant, prominent landmark which rises to 143 metres and is completely ringed by cliffs, some of which fall almost sheer to the sea. The Reserve covers about 60 hectares; two quarries, one at the northern end of The Nut and one at its southeastern end, are excluded. The Nut has been described as the most prominent and dramatic landmark on the northern coast of Tasmania, and is also significant for its Short-tailed Shearwater (or Muttonbird; PUFFINUS TENUIROSTRIS) rookeries. It has been classified as a State Geological Monument and is of outstanding geological interest. The Nut consists of a thick layer of Tertiary teschenite (a coarse-grained basaltic rock) overlying soft sediments. Marine erosion of the sediments has produced the bold, steep-sided cliffs. The origin of the basaltic mass is not known; The Nut may be the solidified lava neck of a volcano, a slab of solidified lava at the top end of a (volcanic) pipe-like feeder from deep within the earth, or an accumulation of lava which flowed into a depression from elsewhere. The summit of The Nut is a tussock grassland, the dominant species being Tussock Grass (POA POIFORMIS), Wallaby-grass (DANTHONIA PILOSA) and the introduced pasture species Cocksfoot (DACTYLIS GLOMERATA) and Perennial Ryegrass (LOLIUM PERENNE). The weeds Gorse (ULEX EUROPAEUS), Winged Slender Thistle (CARDUUS TENUIFLORUS), and Variegated Thistle (SILYBUM marianum) are well-represented in the Reserve. Also common within The Nut State Reserve are Austral Bracken (PTERIDIUM ESCULENTUM), Swordgrass (LOMANDRA LONGIFOLIA), Austrail Bear's Ear (CYMBONOTUS LAWSONIANUS), and Fireweed (SENCIO LINEARIFOLIUS). Less widespread to rare are Silver Banksia (BANKSIA MARGINATA), White Correa (CORREA ALBA), Hop-bush (DODONAEA VIScosa), Manna Gum (EUCALYPTUS VIMINALIS), Blackwood (ACACIA MELANOXYLON), Coast Beard-heath (LEUCOPOGON PARVIFLORUS), Swamp Paper-bark (MELALEUCA ERICIFOLIA), Dusty Daisy-bush (OLEARIA PHLOGOPAPPA), and Twiggly Daisy-bush (O. RAMULOSA). The Reserve is significant as a site utilised by migratory birds, including a large population of Short-tailed Shearwaters (P. TENUIROSTRIS) which are readily viewed by the public; the rare Orange-bellied Parrot (NEOPHEMA CHRYSOGASTER), and a previously unknown visitor to Tasmania, the Black-earedCuckoo (CHRYSOCOCXYX OSCULANS). The Nankeen Kestrel (FALCO CENCHROIDES), which is not known to breed in mainland Tasmania, may nest occasionally on cliffs of The Nut. Pairs of Peregrine Falcon (FALCO PEREGRINUS), a declining species, may also nest on the cliffs; on the seaward side of the cliffs, about 100 pairs of Little Penguin (EUDYPTULA MINOR) are known to breed.

Condition and Integrity: The Nut is grazed by sheep and rabbits, and many aggressive introduced plants, such as gorse (ULEX EUROPAEUS), are present. In the past, the area has been frequently burnt. Birds which use the Reserve are vulnerable to attack by cats or dogs.

Location: About 60ha, which occupies the peninsula to the east of the town of Stanley.

Bibliography:
Department of Parks, Wildlife and Heritage file information, Hobart.


Records of the Queen Victoria Museum, Launceston, 21.****

The Register of the National Estate has been compiled since 1976. The Commission is in the process of developing and/or upgrading official statements of significance for places listed prior to 1991.


The following is a list of implementation actions and their priorities derived from the plan. Only those actions that require the managing authority to develop a works program for have been listed. Many of the actions in the plan are not included here because they are actions which must be undertaken in conjunction with development, e.g., ‘Monitor impacts on geodiversity resulting from developments, rehabilitation or stabilisation work’.

This list is intended to assist the managing authority in developing a rolling works program and in allocating funding as necessary to achieve the management objectives for the reserve.

The acronyms used under ‘Responsibility” stand for the Parks and Wildlife Service District Staff (PWS), the Circular Head Council (CHC), the Stanley Peninsula Land and Coastcare Group (SPLACG) and the Tasmania Fire Service (TFS).

<table>
<thead>
<tr>
<th>Section and Action</th>
<th>Responsibility</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3 Remove or relocate the fire tower and shed to a site adjacent to the chairlift</td>
<td>TFS in consultation with the PWS, the SPLACG and chairlift manager</td>
<td>Medium</td>
</tr>
<tr>
<td>3.6 and 3.7 Prepare a map showing areas of high conservation value which require</td>
<td>PWS in consultation with PWS flora and fauna specialists and the SPLACG</td>
<td>High</td>
</tr>
<tr>
<td>special management action in regard to weed and fire management programs. The</td>
<td></td>
<td></td>
</tr>
<tr>
<td>map should show the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• remnant native vegetation areas;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• location of straw daisy populations;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• rehabilitated and natural revegetation areas;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• gorse mite trial site;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• raptor breeding sites;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• shearwater and penguin colonies;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• the ivy wall habitat of the Stanley snail; and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• other flora or fauna communities of conservation significance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.6 and 3.7 Prepare programs of ecological management, setting out the slashing,</td>
<td>PWS in consultation with TFS, SPLACG and PWS flora and fauna specialists</td>
<td>Very High</td>
</tr>
<tr>
<td>spraying and fire frequencies necessary to control weeds and improve habitat</td>
<td></td>
<td>Ongoing</td>
</tr>
<tr>
<td>for indigenous flora and fauna, particularly species of high conservation value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>as identified on the above map.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.6 Prepare and implement management programs for the endangered straw daisy</td>
<td>PWS in consultation with PWS threatened species specialists as necessary</td>
<td>High</td>
</tr>
<tr>
<td>using the management recommendations in Appendix 2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.7 Monitor the breeding success of Australian kestrels, peregrine falcons, little</td>
<td>PWS with assistance from volunteers</td>
<td>Medium</td>
</tr>
<tr>
<td>penguins, the Stanley snail.</td>
<td></td>
<td>Ongoing</td>
</tr>
<tr>
<td>3.7 Install ‘Restricted Area’ signs to indicate closure of areas to general</td>
<td>PWS</td>
<td>Very High</td>
</tr>
<tr>
<td>public access year round.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.7 Conduct fauna surveys.</td>
<td>PWS with volunteer assistance</td>
<td>Medium</td>
</tr>
<tr>
<td>3.8.1 In cooperation with the Aboriginal community, identify, record, manage,</td>
<td>PWS and the local Aboriginal community and PWS Aboriginal heritage specialists</td>
<td>High</td>
</tr>
<tr>
<td>monitor, protect and interpret Aboriginal sites.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action</td>
<td>Responsible Party</td>
<td>Priority</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>3.8.2 Manage and conserve historic heritage and features as prescribed.</td>
<td>PWS in consultation with PWS historic heritage staff and local community</td>
<td>Ongoing</td>
</tr>
<tr>
<td>3.8.2 and 4.1 Ensure adequate fire protection measures are undertaken by lessees of the Green House.</td>
<td>PWS and TFS</td>
<td>High</td>
</tr>
<tr>
<td>3.8.3 Manage and conserve the cultural landscape as prescribed.</td>
<td>PWS and SPLACG</td>
<td>Ongoing</td>
</tr>
<tr>
<td>4.1 Develop and implement a fire management plan.</td>
<td>PWS in consultation with TFS and SPLACG</td>
<td>Very High</td>
</tr>
<tr>
<td>4.1 and 5.4.2 Maintain and manage all firebreaks and fire trails as prescribed.</td>
<td>PWS in cooperation with TFS, CHC and local residents</td>
<td>High</td>
</tr>
<tr>
<td>4.1 Maintain the fire trail behind Alexander Trail to allow emergency vehicle access. License private residents as prescribed.</td>
<td>PWS in cooperation with CHC and local residents</td>
<td>High</td>
</tr>
<tr>
<td>4.1 Ensure fire management equipment is operational and ensure staff and volunteers are trained.</td>
<td>PWS</td>
<td>Very High</td>
</tr>
<tr>
<td>4.1 Strictly enforce fire restrictions.</td>
<td>PWS</td>
<td>High</td>
</tr>
<tr>
<td>4.2 Undertake and monitor introduced animal control as prescribed.</td>
<td>PWS</td>
<td>High</td>
</tr>
<tr>
<td>4.2 Replace rotten fence posts and ensure that fencing around the reserve is in good order.</td>
<td>PWS in cooperation with CHC</td>
<td>Medium</td>
</tr>
<tr>
<td>4.3 Undertake weed management and revegetation as prescribed. Ensure adequate funding.</td>
<td>PWS with the assistance of SPLACG, CHC and volunteers</td>
<td>Very High</td>
</tr>
<tr>
<td>4.4 Rehabilitate, revegetate or otherwise stabilise disturbed or eroding areas, particularly on walking tracks.</td>
<td>PWS in cooperation with CHC and SPLACG</td>
<td>High</td>
</tr>
<tr>
<td>4.5 and 5.3 Encourage safe and minimal impact use of the reserve as prescribed.</td>
<td>PWS</td>
<td>Medium</td>
</tr>
<tr>
<td>4.6 Manage development works as prescribed.</td>
<td>PWS and CHC</td>
<td>Ongoing</td>
</tr>
<tr>
<td>5.1, 5.5.1, 5.5.2 and 5.5.3 Monitor visitor numbers and pressures as prescribed.</td>
<td>PWS in cooperation with concessionaires and CHC</td>
<td>Medium</td>
</tr>
<tr>
<td>5.2 Promote the reserve as prescribed.</td>
<td>PWS, Tourism Tasmania, CHC, local businesses</td>
<td>Ongoing</td>
</tr>
<tr>
<td>5.3 Reconstruct interpretation alcove at the Green House.</td>
<td>PWS in cooperation with CHC</td>
<td>High</td>
</tr>
<tr>
<td>5.3 and 5.5.2 Upgrade and then maintain existing interpretation at the Green House and at the summit lookouts as prescribed.</td>
<td>PWS in consultation with PWS interpretation specialists</td>
<td>High</td>
</tr>
<tr>
<td>5.4.1 Minimise the impact of low flying aircraft on the visitors and wildlife of the reserve as prescribed.</td>
<td>PWS in consultation with the Civil Aviation Authority and Air Force</td>
<td>Low</td>
</tr>
<tr>
<td>5.4 Monitor and maintain carparks as prescribed to provide adequate and safe parking.</td>
<td>PWS</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Section</td>
<td>Task Description</td>
<td>Responsible Parties</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>5.4.2</td>
<td>Ensure that Browns Road in the reserve is maintained in safe and accessible condition.</td>
<td>PWS in cooperation with CHC</td>
</tr>
<tr>
<td>5.4.3</td>
<td>Ensure that chairlift operator removes exotic vegetation from upper terminal area and revegetates with appropriate local native species.</td>
<td>PWS and chairlift operator with advice from SPLACG for appropriate species</td>
</tr>
<tr>
<td>5.4.4</td>
<td>Maintain and clearly mark walking tracks as prescribed.</td>
<td>PWS</td>
</tr>
<tr>
<td>5.4.4</td>
<td>Investigate the development and interpretation of new short walking tracks as prescribed.</td>
<td>PWS</td>
</tr>
<tr>
<td>5.5.2</td>
<td>Designate and signpost Browns Road and fire trails as prescribed for bicycle use.</td>
<td>PWS in cooperation with CHC</td>
</tr>
<tr>
<td>5.5.1</td>
<td>Prepare a site plan and make available for public comment as prescribed for the Visitor Services Zone for any new developments or major redevelopments.</td>
<td>PWS in cooperation with CHC</td>
</tr>
<tr>
<td>5.5.2</td>
<td>Maintain or upgrade services and facilities in Recreation Zone as prescribed and listed above.</td>
<td>PWS</td>
</tr>
<tr>
<td>5.5.3</td>
<td>Monitor user impacts in the Recreation Zone.</td>
<td>PWS</td>
</tr>
<tr>
<td>5.5.4</td>
<td>Assess new development proposals as prescribed and ensure all statutory requirements and approvals are met or obtained.</td>
<td>PWS and CHC</td>
</tr>
<tr>
<td>6.1</td>
<td>Undertake community consultation and ensure community involvement as prescribed.</td>
<td>PWS and CHC</td>
</tr>
<tr>
<td>7.4.1</td>
<td>Train staff to understand and implement this management plan.</td>
<td>PWS and CHC</td>
</tr>
<tr>
<td>7.4.1</td>
<td>Review implementation annually and provide report to Director, PWS at 5-year intervals as prescribed.</td>
<td>PWS and CHC</td>
</tr>
<tr>
<td>7.4.2</td>
<td>Ensure adequate first aid supplies and first aid training for concessionaires on site at the café and the chairlift.</td>
<td>PWS and concessionaires</td>
</tr>
<tr>
<td>7.4.2</td>
<td>Adopt risk management practices as prescribed.</td>
<td>PWS</td>
</tr>
<tr>
<td>7.4.3</td>
<td>Ensure staff are trained and authorised to enforce the Acts and Regulations relevant to the reserve.</td>
<td>PWS and CHC</td>
</tr>
<tr>
<td>7.5</td>
<td>Gather baseline data as prescribed for reporting on management performance.</td>
<td>PWS</td>
</tr>
</tbody>
</table>
Appendix 13  Draft Terms of Reference
for The Nut State Reserve Community Co-Management Group

These draft terms of reference are based on those developed by the Peter Murrell Reserves Co-Management Group, which has been operating effectively since 1997.

Introduction

• The Nut State Reserve Community Co-Management Group (CCG) is an advisory group established by the Parks and Wildlife Service (PWS) to discuss management and recreational use of the reserves and any conflicts or problems which may arise from implementation of The Nut State Reserve Management Plan.

• The CCG is designed to be a forum for local community, user and interest groups to involve themselves in the ongoing management of the reserves and to provide a structured means of communication between PWS and these groups.

• While the Parks and Wildlife Service is the managing authority for The Nut State Reserve, management decisions will take account of the views of the CCG.

Aims

• Provide meaningful input into reserve management including participation in the implementation of strategies as well as encouraging participation in volunteer and community work projects.

• Maintain a link between PWS and users to ensure the protection of the reserve’s natural and cultural values.

• Discuss management priorities and programs.

• Report on user and interest groups past activities and events as well as identify proposed activities and events.

Membership

Representation will be invited from the following groups, however the CCG is intended to be an open forum.

• Parks and Wildlife Service
• Circular Head Council
• Stanley Peninsula Land and Coastcare Group
• Local Tasmanian Fire Service
• Tasmanian Aboriginal community
• Stanley Primary School
• Local tourism interests
• Local business interests
• Local historical groups
• Local community

Meeting procedure

• PWS Ranger to chair the meetings.

• Meetings shall occur as often as necessary, but at least twice each calendar year.

4.3  PWS to provide the administrative support to the CCG, including the preparation and distribution of records of the meetings.