


Rabbit-induced landslides: two of many, Macquarie Island, 2006


“Due to high rainfall of recent months, and the insatiable eating ability of the rabbits, beautiful Lusitania Bay became the victim of a landslide ...”: [This week at Macquarie Island](http://www.aad.gov.au/default.asp?casid=26993), 22 September 2006, at <http://www.aad.gov.au/default.asp?casid=26993> Courtesy Australian Government Antarctic Division © Commonwealth of Australia 2006.

1.1 Macquarie Island’s largest King penguin colony, Lusitania Bay: BEFORE landslide

**Macquarie Island
Nature Reserve
and World Heritage Area**



Management Plan 2006



“Summary of Macquarie Island Nature Reserve and World Heritage Area Management Plan 2006

Summary

Macquarie Island Nature Reserve is one of the most valuable reserves in Australia and the world, well recognised for its conservation, geological, ecological and scientific values. It is a World Heritage Area, a Biosphere Reserve, and is listed on the Register of the National Estate. ...

...

One of the highest conservation priorities in the reserve is the eradication of rabbits, rats and mice from the island. These alien species are identified as causing extensive impacts on the biodiversity and landscape of the reserve.”

www.parks.tas.gov.au/publications/tech/macquarie/summary.html



Parks and Wildlife Service 2006, *Macquarie Island Nature Reserve and World Heritage Area Management Plan*, Parks and Wildlife Service, Department of Tourism, Arts and the Environment, Hobart. © 2006 Crown in Right of State of Tasmania. Cover photograph: Lusitania Bay King Penguin Colony, Noel Carmichael. <http://www.parks.tas.gov.au/publications/tech/macquarie/summary.html>

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Tasmania National Parks Association Inc. December 2006.

1.2 Macquarie Island's largest King penguin colony, Lusitania Bay: AFTER 2006 landslide

Steep slopes, below centre and left, had healthy tussock vegetation in the previous photo.

Now, note below extensive dead (light-brown) rabbit-grazed tussocks across the slopes and landslides. The largest landslide, centre, buried penguins in September 2006: see below.



As rabbit damage continues, how long until the next landslides?

Lower right partly grazed tussock.

White dots are King penguins: 'sitting ducks'.

Lusitania Bay, Macquarie Island, Tasmanian National Parks Association, November 2006

Text and 3 photos immediately below are downloaded from [This week at Macquarie Island](http://www.aad.gov.au/default.asp?casid=26993), 22 September 2006, at <http://www.aad.gov.au/default.asp?casid=26993> Courtesy Australian Government Antarctic Division © Commonwealth of Australia 2006. See copyright notice at <http://www.aad.gov.au/default.asp?casid=8>

“Due to high rainfall of recent months, and the insatiable eating ability of the rabbits, beautiful Lusitania Bay became the victim of a landslide. Lusi Bay is home to a very large king penguin colony and a number of them were lost under the mud.”



Lusi Bay landslide
[Photo: J. Wruck](#)



Lusi Bay landslide
[Photo: J. Wruck](#)



Landslide smorgasbord
[Photo: J. Wruck](#)

1.3 Foot of Lusitania Bay landslide



Background slopes denuded by rabbit grazing. Note extensive dead (light-brown) rabbit-grazed tussocks across these slopes

Foreground tussocks already partly grazed

Photo J. Wruck downloaded from [This week at Macquarie Island](http://www.aad.gov.au/default.asp?casid=26993), 22 September 2006, at <http://www.aad.gov.au/default.asp?casid=26993> Courtesy Australian Government Antarctic Division © Commonwealth of Australia 2006. See copyright notice at <http://www.aad.gov.au/default.asp?casid=8>

1.4 Unhappy feet

Below: giant petrels and skuas scavenge a protruding carcass - one of the penguins buried by landslide at Lusitania Bay, Macquarie Island, September 2006.



Photo J. Wruck downloaded from [This week at Macquarie Island](http://www.aad.gov.au/default.asp?casid=26993), 22 September 2006, at <http://www.aad.gov.au/default.asp?casid=26993> Courtesy Australian Government Antarctic Division © Commonwealth of Australia 2006. See copyright notice at <http://www.aad.gov.au/default.asp?casid=8>

Map of Lusitania Bay penguin colony is at 3.1.

2.1 Royal penguin viewing platform, Sandy Bay, northern Macquarie Island



Before: 1990

Viewing platform.

Healthy tussock vegetation surrounding Royal penguin breeding colony.



After: December 2005

Rabbit grazing has caused total destruction of tussock vegetation. Only stumps now remain.

2.2 Boardwalk leading to viewing platform, Sandy Bay, Macquarie Island



Before: 1990

Healthy tussock vegetation.



After: December 2005

Rabbit grazing has caused total destruction of tussock vegetation. Only stumps now remain.

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2.3 Staircase access to boardwalk & platform, Sandy Bay, Macquarie Island



Before: 1990

Healthy slope with tussock and Macquarie Island cabbage.



After: December 2005

Destruction of tussock and Macquarie Island cabbage by rabbits, landslip erosion.



Now: November 2006

New landslide in September 2006 adjacent to Sandy Bay staircase forces closure of staircase to boardwalk and viewing platform.

Royal penguins gather “down by the boardwalk”.

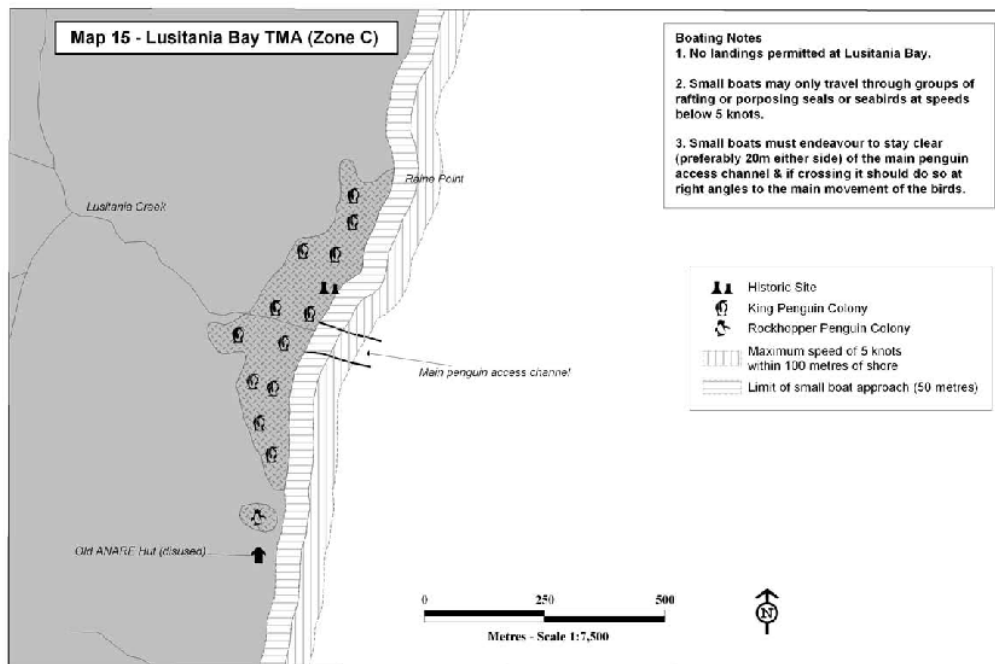
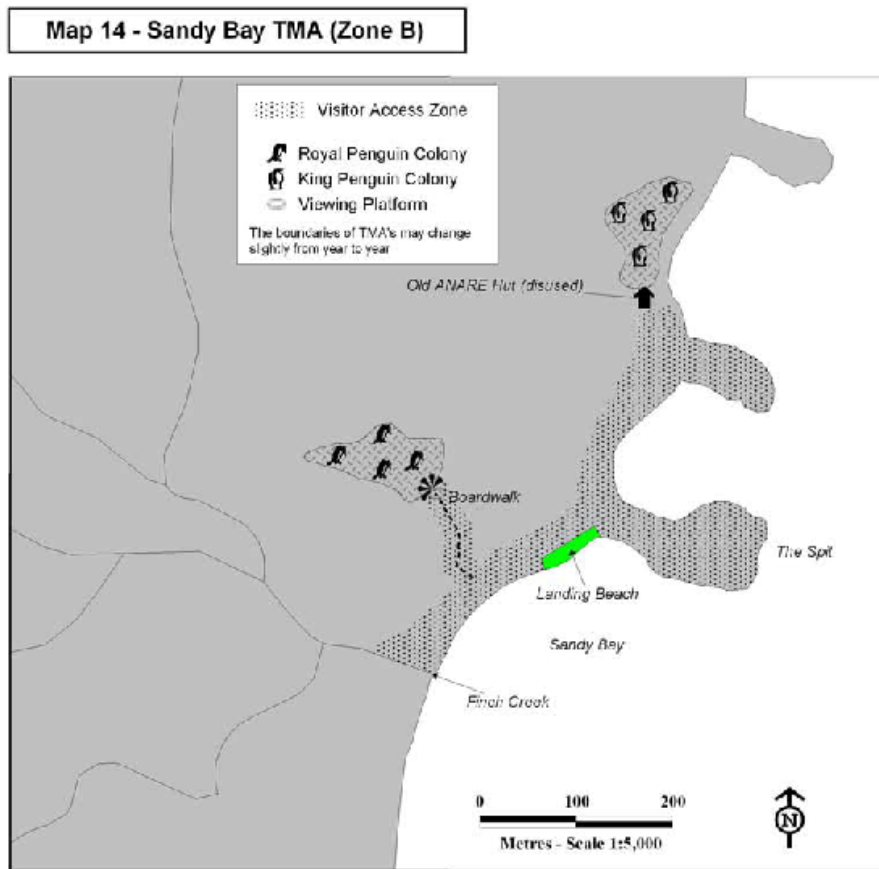
Rabbit-induced tussock damage caused this landslide rendering the staircase both unsightly and unsafe. The landslide and consequent closure of the staircase has prevented access to the above boardwalk and viewing platform by visitors this summer (the first voyage has already visited the island). This means that visitors cannot now walk inland from the beach to view the breeding colony of Royal penguins, a species endemic to Macquarie Island. Some penguins can still be seen on the beach but not in their breeding colony which, in any case, is now surrounded by dead tussock vegetation shown in 2.1 above. See map at 3.1.

Under the World Heritage Convention, Article 4, Australia agreed to the duty of: “...ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage ... situated on its territory ... It will do all it can to this end, to the utmost of its own resources”

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3.1 Maps of Sandy Bay and Lusitania Bay Tourism Management Areas

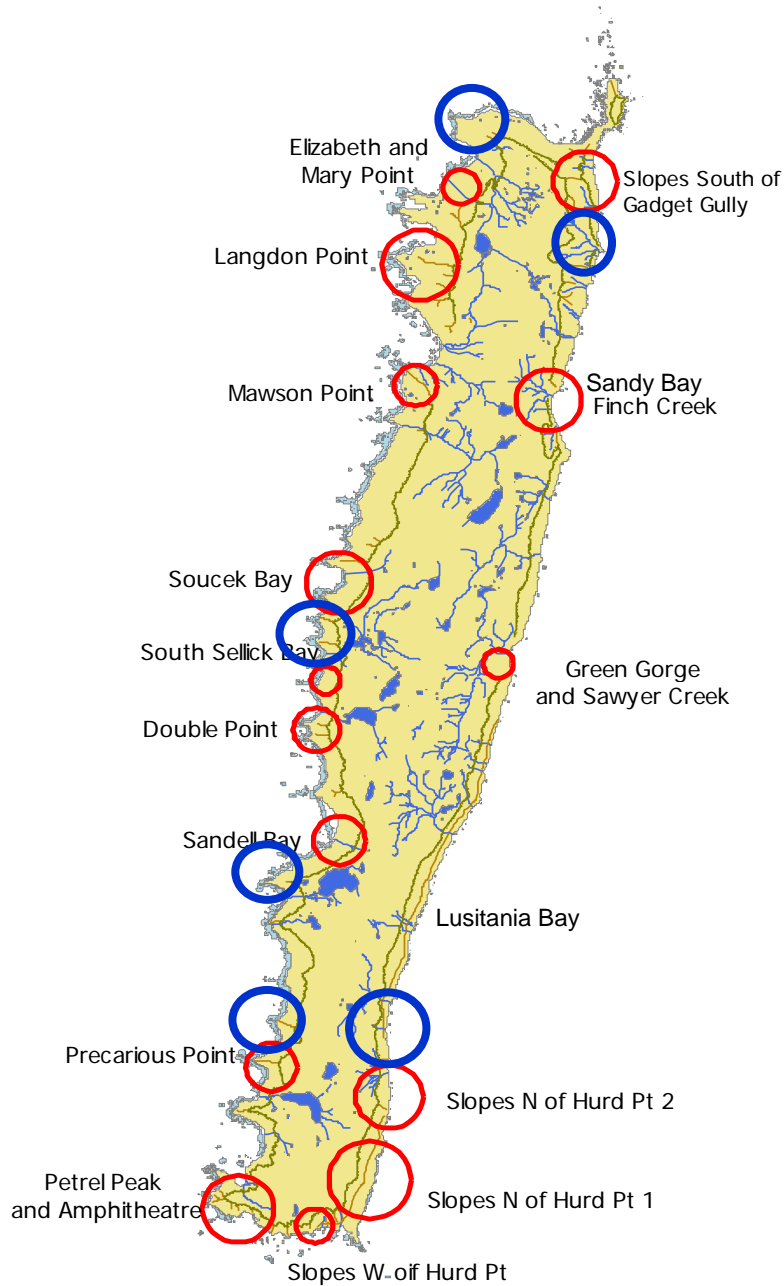


Source: Parks and Wildlife Service 2006, *Macquarie Island Nature Reserve and World Heritage Area Management Plan*, Parks and Wildlife Service, Department of Tourism, Arts and the Environment, Hobart. © 2006 Crown in Right of State of Tasmania <http://www.parks.tas.gov.au/publications/tech/macquarie/summary.html> Maps 14 and 15.

3.2 Where next? Most severely rabbit-damaged coastal slopes: face high landslide risk

2004 **red circles**: 15 major regions of significant rabbit damage identified, most on west and south coastal slopes.

2006 **blue circles**: A further 6 coastal slopes identified with extreme rabbit damage.



Most severely rabbit-damaged coastal slopes, Macquarie Island, 2004 and 2006

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4. Urgent Action Required: Rabbit and Rodent Eradication Plan

The Australian and Tasmanian Governments must, immediately, fully fund and implement the Rabbit and Rodent Eradication Plan. See <http://www.tnpa.asn.au/macquarie/index.html> and other links below.

5. Further Website Information and Images

Tasmanian National Parks Association Macquarie Island page has info and many images <http://www.tnpa.asn.au/macquarie/index.html>

WWF's *Weeds and Pests* page <http://wwf.org.au/ourwork/invasives/> currently includes:

Grey-headed albatross face extinction on Macquarie Island

<http://wwf.org.au/news/grey-headed-albatross-face-extinction-on-macquarie-island/>

Macquarie Island factsheet

<http://wwf.org.au/publications/macquarie-island-factsheet/>

Precious island 'arks' under attack

<http://wwf.org.au/articles/precious-island-arks-under-attack/>

World Heritage island threatened by rabbits and rats

<http://wwf.org.au/news/world-heritage-island-threatened-by-rabbits-and-rats/>

Rats on off-shore islands

<http://wwf.org.au/ourwork/invasives/rats/>

Tasmania Parks and Wildlife Service website <http://www.parks.tas.gov.au> currently includes:

Parks and Wildlife Service 2006, *Macquarie Island - Rabbit Impact and Management* Department of Tourism, Arts and the Environment, Hobart. © State of Tasmania

http://www.parks.tas.gov.au/factsheets/parks_and_places/MacquarieIslandRabbits.pdf

Parks and Wildlife Service 2006, *Macquarie Island Nature Reserve and World Heritage Area Management Plan*, Parks and Wildlife Service, Department of Tourism, Arts and the Environment, Hobart. © 2006 Crown in Right of State of Tasmania

<http://www.parks.tas.gov.au/publications/tech/macquarie/summary.html>

Produced by the Tasmania National Parks Association Inc. <http://www.tnpa.asn.au>

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The TNPA seeks to preserve Tasmania's national parks and reserves through better management.

Version 1 – December 2006.

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