Australian Government

STATE PARTY REPORT
ON THE STATE OF CONSERVATION

OF

MACQUARIE ISLAND
(AUSTRALIA)

(N629 rev)

IN RESPONSE TO DECISION OF THE WORLD HERITAGE COMMITTEE WHC 32 COM 7B.9

FOR SUBMISSION BY
1 FEBRUARY 2010

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WHC DECISION

Thirty-second session - Quebec City, Canada - 2-10 July 2008
Macquarie Island (Australia) - Decision: 32 COM 7B.9

The World Heritage Committee,

1. Having examined Document WHC-08/32.COM/7B,

2. Recalling Decision 31 COM 7B.14, adopted at its 31st session (Christchurch, 2007),

3. Takes note, with satisfaction of the progress made with the planning and preparation for the implementation of the plan for the eradication of invasive rabbits and rodents that adversely impact the property's values and integrity;

4. Requests the State Party to proceed quickly with the implementation of the eradication plan and to secure and allocate sufficient financial and technical resources for key pre and post eradication monitoring activities, such as vegetation and seabird monitoring on the island, which will help to demonstrate the benefits of the eradication project;

5. Recalls the 2003 recommendations of the Bureau of the UNESCO Man-and-Biosphere (MAB) Programme's International Coordinating Council to consider withdrawing Macquarie Island from the World Network of Biosphere Reserves and to focus on the World Heritage status of this property, considering that it is not a functional biosphere reserve as it lacks human residents and does not demonstrate sustainable development;

6. Also requests the State Party to submit to the World Heritage Centre by **1 February 2010,** an updated report on the state of conservation of the property, including information on the progress made with the implementation of the eradication plan, the estimated size of the rabbit population on the island, and the potential impact on the island's seabirds of long-lining fishing trials in the waters around the island, for examination by the Committee at its 34th session in 2010.

EXECUTIVE SUMMARY

This Update Report on the State of Conservation of the Macquarie Island World Heritage Area responds to World Heritage Committee **Decision 32 COM 7B.9**.

Eradication Plan
Implementation of the *Macquarie Island Pest Eradication Plan* has commenced and arrangements for the bait drop and other on-ground actions to occur in winter 2010 are advanced.

The major component plans for the eradication have been completed and are publicly available. Key staff have been recruited and field staff selected. Thirteen dogs have reached interim certification and all the dogs are expected to reach final certification by the end of May 2010.

Bait, helicopter and shipping suppliers have been selected and the project team is working with the suppliers to ensure the most effective provision of these major components.

Comprehensive monitoring and biosecurity plans have been developed and extensively peer reviewed. They are expected to be available in February 2010.

The New Zealand Department of Conservation has provided significant assistance to the project and will be carrying out readiness checks in February and April 2010 to ensure that nothing is overlooked.

Rabbit numbers
Rabbit numbers peaked in 2005 at an estimated maximum of 148,200. In 2008 there was an estimated maximum of 79,700 rabbits on the island.

Long-lining trials
Strictly managed long line fishing trials around Macquarie Island have now operated for three seasons. No seabirds have been observed to be killed by fishing gear during that time.

Man-and-Biosphere
Australia acknowledges that Macquarie Island is not a functional biosphere reserve and will seek its withdrawal from the World Network of Biosphere Reserves.

Other conservation issues

Dieback of *Azorella macquariensis* has emerged as a serious concern in 2009, with up to 90% of cushions in some locations being affected. A number of measures have been implemented to identify the cause of the dieback and prevent its spread.

1. RESPONSE FROM THE STATE PARTY TO THE WORLD HERITAGE COMMITTEE'S DECISION

This Update Report on the State of Conservation of the Macquarie Island World Heritage Area (TWWHA) responds to World Heritage Committee **Decision 32 COM 7B.9.**

Implementation of the rabbit and rodent eradication plan is making good progress as outlined below. Baiting will commence on Macquarie Island in May 2010. The eradication of rabbits and rodents from Macquarie Island is the largest and most complex island eradication attempted anywhere in the world for these pests. Planning for the eradication has been detailed and comprehensive to provide the project with the highest chance of success.

The Australian Government will be in a position to provide the World Heritage Committee with preliminary information as to the outcome of the eradication project in February 2013.

1.1. Paragraph 6 of the Committee's Decision – Implementation of the Eradication Plan

Tasmanian and Australian Government environmental approvals have been received and planning is almost complete:

- The Project Overview and the Project Plan are available on the Tasmanian Parks and Wildlife website: http://www.parks.tas.gov.au/index.aspx?base=12997.
- The Environmental Impact Statement is available on the Department of the Environment, Water, Heritage and the Arts website: http://www.environment.gov.au/cgibin/epbc/epbc_ap.pl?name=current_referral_detail&proposal_id=5079.
- The draft Operational, Biosecurity and Monitoring Plans are at an advanced stage and are expected to be approved in February 2010.

The project team (Project Manager, Assistant Project Manager and support staff) has recruited key staff for the on-ground operation. These include a GIS Technician, Baiting Operations Adviser, Assistant Eradication Team Leader (dog handlers), Assistant Eradication Team Leader (Field Assistants) and Field Assistant (Trades). Selection of 12 additional field staff has been conducted and the successful applicants notified. These staff will commence duty as required between early February and mid May 2010.

Well trained dogs are essential to the success of the eradication. Seventeen dogs are being trained to provide the 11 dogs contracted to be supplied. Thirteen of these dogs have reached interim certification. All dogs are expected to achieve final certification by May 2010. One of the dog trainers and two of his dogs visited Macquarie Island in October 2009 to observe conditions on the island. Although the dogs performed well on the island, minor adjustments have been made to the training program and equipment to better prepare dogs for conditions on the island.

Tenders have been let for the supply of helicopter and shipping services as well as for the construction of bait pods. The contract for helicopter services (helicopters, pilots and support staff, and buckets for distributing bait) has been finalised. Negotiations are underway with the shipping and bait pod suppliers. A contract has been sent to the bait supplier.

The Chief Pilot visited Macquarie Island in October to familiarise himself with the situation on the island and the impacts of rabbits. He was able to test the navigation system which will be used on the island and confirmed that the GIS overlays he has for the baiting flight paths are accurate. He estimates it will take only three full days of dry, reasonably calm conditions to complete each of three bait drops. However such conditions are not regular or predictable, 100 days have been allocated to this task. A period of 10-14 days is required between bait drops to ensure maximum impact of the toxin.

The New Zealand Department Of Conservation (DOC) is represented on the Steering Committee for the project and has provided support and advice to the project team throughout the planning and implementation of the eradication project thus far. DOC will run a readiness check for the project in February 2010 to ensure that nothing has been missed in preparation for the on-ground implementation phase. A final readiness check will be conducted in Hobart in April 2010.

A web site for the eradication project has been established to provide the public with more information:
http://www.parks.tas.gov.au/index.aspx?base=13013.

A copy of the latest newsletter for the project is attached.

1.2. Paragraph 6 of the Committee's Decision - Rabbit numbers

Rabbit numbers have been monitored since 1974 at a number of sites around the island. There are currently 14 monitoring sites. Early monitoring showed rabbit numbers fall following the introduction of the Myxoma virus, to a low point in the early to mid 1980s. Rabbit numbers then increased from the late 1990s and peaked again in 2005, with an estimated maximum of 148,200.

In 2008 the estimated number of rabbits on the island for the entire year was 60,300 - 79,700, with an annual mean of 70,000. During the May to August period, which corresponds with the timing for the aerial baiting phase of the eradication project, it was approximately 36,000 (31,424 – 40,423).

Impacts due to the rabbits continue to vary across the island, with vegetation condition improving in some areas and deteriorating in others.

1.3. Paragraph 4 of the Committee's Decision - Monitoring

A comprehensive Monitoring Plan has been developed for the project. It includes provision for monitoring the performance of the baiting and ground hunting operations (effectiveness and non-target impacts) and the broader outcomes of the project on the ecology of Macquarie Island. The plan has been extensively peer reviewed and is nearing finalisation.

As part of the eradication, monitoring of rabbit numbers and density will continue whilst there are sufficient rabbits to warrant the effort. However it is intended that both rabbit presence and hunting effort will be monitored until completion of the project, expected to be in about November 2014.

Bait quality, spread and uptake will be monitored during the baiting operation. Wandering Albatross nests will be monitored and any baits within reach of chicks will be removed. The impacts of helicopters flying over King Penguin colonies will be monitored and flying height changed should the penguins be significantly disturbed. Visual monitoring for signs of rodents will occur throughout the operation.

Throughout the baiting and hunting period any environmental impacts associated with the eradication, particularly on sensitive environments and geomorphology, will be recorded.

Staff of the Tasmanian Department of Primary Industries, Parks, Water and the Environment will continue to monitor seabirds on the island. Additional Australian Government funds have been provided for albatross and giant petrel monitoring in 2009-2011.

Vegetation monitoring has been conducted on the island by employees of the Tasmanian Department of Primary Industries, Parks, Water and the Environment and the Australian Antarctic Division. Vegetation monitoring, and in particular the rabbit grazing damage survey, will continue.

Twenty-eight rabbit exclusion plots have been established to protect samples of undisturbed vegetation and some vulnerable plant species. These will also provide a seed source from which vegetation on the island can re-establish.

The Biosecurity Plan commits to monitoring the distribution of alien plant species on Macquarie Island as well as continuing monitoring for new alien plant and animal species, particularly at the main visitor landing sites on the island. In addition, relevant locations in Hobart will be monitored for the presence of rodents and invertebrates. Implementation of the Biosecurity Plan for the island should prevent the introduction or reintroduction of alien species.

1.4 Paragraph 6 of the Committee's decision - Long-lining fishing trials

All fishing that is permitted by the Australian Fisheries Management Agency around Macquarie Island is very strictly managed. The longline fishing trial has now operated for three seasons under comprehensive rules to protect seabirds, including a large number of extensively proven mitigation measures. These measures include night setting, use of integrated-weight longline only, 100% observer coverage, blue snoods, paired streamer lines and retention of all offal. There is also a requirement to cease longline fishing for the season if the seabird bycatch limit – a total of between one and three seabirds, depending on the species involved – is reached as a result of interactions with fishing gear. No seabirds have been observed killed by fishing gear during the three seasons to date.

The trial is expected to continue into 2010, after which a request will go to the Minister for the Environment, Heritage and the Arts for approval of long-lining as an authorised method of fishing in the region. This request will be submitted in November 2010 as part of the normal strategic assessment of the Macquarie Island toothfish fishery that occurs every five years and assesses its environmental impacts and sustainability.

1.5 Paragraph 5 of the Committee's decision - Man-and-Biosphere

Australia acknowledges that Macquarie Island is not a functional biosphere reserve and will seek its withdrawal from the World Network of Biosphere Reserves.

2. OTHER CURRENT CONSERVATION ISSUES IDENTIFIED BY THE STATE PARTY

Dieback of *Azorella macquariensis* (a cushion plant which is an important component of the island's feldmark vegetation) has emerged as a serious concern in 2009, with up to 90% of cushions in some locations being affected. Investigations as to whether a pathogen is involved and other likely causes of the epidemic are continuing. There has been no indication of dieback among *Azorella* from other subantarctic islands, or of dieback on a similar scale being recorded elsewhere. Given the very low levels of human activity on the island the rapid rate of spread of dieback suggests that humans are unlikely to be the primary vector for spread of the dieback.

Data collected over the 2008-09 summer is being analysed to ascertain the factors which may be implicated in the epidemic and whether there is patterning in the dieback.

In addition, GPS mapping of both diseased and disease-free areas around travel routes on the island has been completed. This mapping is being used to implement biosecurity precautions for intra-island travel. Areas where there are currently 'healthy' *Azorella* populations have been identified for future monitoring. There is ongoing monitoring of diseased plants to detect any possible recovery of these plants.

Testing for pathogens so far has been limited by the poor condition of material reaching Hobart but has revealed that two possible fungi and a bacterium in the leaf material of samples are saprophytic (feed on dead tissue) rather than pathogenic. Testing for *Phytophthora* and other possible pathogens from leaf material has proved negative. A fresh batch of leaf material and fresh root material was collected in the spring of 2009. Testing of this material has failed to identify any primary pathogens.

Additional island quarantine measures were implemented in February 2009 to minimise the risk of spreading any pathogen within the island, or from Macquarie to other subantarctic islands or Tasmania. These measures were based on a risk management approach and are not guaranteed to be able to target all potential pathogens. The Australian Antarctic Division will ensure appropriate cleaning of all clothing and equipment travelling to and returning from Macquarie Island.

Enhanced quarantine procedures will be implemented for 2009-10 tourists. The New Zealand Department of Conservation has been advised of the

potential risk of spread as have South African, United Kingdom and French subantarctic island managers.

Limited quantities of seed were collected in autumn 2009 and sent to the Royal Tasmanian Botanic Gardens and the Millennium Seedbank project as an insurance measure.

Additional measures being implemented in an attempt to arrest the decline of the species include supplementing the collection of living plants at the Royal Tasmanian Botanical Gardens, attempting to propagate the species using tissue culture techniques and establishing an ex situ population on Macquarie Island near the station. Australian government funds have been provided to assist in implementing these measures.

Azorella macquariensis has recently been listed as endangered under State legislation and an application has been made to list the species as threatened under Commonwealth legislation.

Azorella dieback is unlikely to affect eradication operations on Macquarie Island since humans are not likely to be vectors for the dieback.

3. POTENTIAL MAJOR RESTORATIONS, ALTERATIONS AND/OR NEW CONSTRUCTION(S) WITHIN THE PROTECTED AREA

No other major restorations, alterations or construction are planned for the protected area.

As part of Australia's commitment to the Comprehensive Nuclear-Test-Ban Treaty a radionuclide air sampling station is being installed on Macquarie Island. The station is to be located in an existing building with only a high volume air pump located externally.

The assessment of the proposal is at: http://www.environment.gov.au/cgi-bin/epbc/epbc_ap.pl?name=current_referral_detail&proposal_id=5000.