

MEDIA RELEASE

NEWS FROM THE UNIVERSITY OF TASMANIA

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ATTENTION: Chiefs of Staff, News Directors



Satellite images reveal Macquarie Island devastation

The work of a University of Tasmania scientist in analysing satellite images showing the devastation of vegetation on Macquarie Island by rabbits will be published in the prestigious *Journal of Applied Ecology* TOMORROW (January 13).

Dr Arko Lucieer from the School of Geography and Environmental Science worked with lead researcher Dr Dana Bergstrom from the Australian Antarctic Division, comparing satellite images from the year 2000 with those from 2007.

Their paper was chosen as the editor's choice for the January 2009 edition of the UK-based journal.

Dr Bergstrom's team went to the island to analyse small one-meter square plots of vegetation in situ.

Then they used satellite images to get an overview of the vegetation trends across the island.

Drs Bergstrom and Lucieer found that rabbits put on the island in the 19th century by sealing gangs for food for shipwrecked people were partially controlled by 10 years of release of the European rabbit flea, then even more by the myxoma virus.

But in the past 7 years that control has been completely reversed partly due to:

- Eradication of the island's cats which kept rabbits under control;
- Decrease in effectiveness of myxoma virus.

Now 50 per cent of all coastal slopes on Macquarie Island have lost vegetation.

Dr Lucieer said that for the study he used Landsat images in 2000 with a resolution of 30m (30m per pixel) and Quickbird images with a 60cm resolution in 2007.

"These days it is possible to see land areas in great detail via satellite images," he said.

Currently the Australian and Tasmanian Government's have contributed \$24m to further rabbit management efforts; eradication planning began in 2008. The plan will be implemented in 2010.

"It will be the largest island on which this type of eradication has been attempted but they have employed the best experts in the field to do it," Dr Lucieer said.

“I also hope to update our understanding of the current rabbit impact with another satellite image this year.”

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