



BUTTONGRASS

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Island eradication projects underway

Two major conservation projects are underway as this edition is being prepared; the eradication of cats from Tasman Island, and further south on Macquarie Island rabbits, ship rats and mice are the targets of an eradication effort. Both projects will be a big step forward in building knowledge and experience within the Parks and Wildlife Service for future eradication projects.

Macquarie Island Pest Eradication Project

A small speck of land in the vast Southern Ocean is about to undergo a transformation as the Macquarie Island Pest Eradication Project moves into a crucial phase.

In the past few years the World Heritage listed island has been ravaged by introduced ship rats, house mice and rabbits. The effects of up to 100,000 rabbits grazing on the once lush vegetation have been dramatic, with an estimated 90 per cent of the island vegetation showing evidence of removal, including from landslides.

The rodents are also having a significant impact on the island - particularly ship rats, which are omnivorous and prey on chicks and eggs of burrow-nesting petrels. They are also having a significant impact on vegetation and invertebrate populations.

It's been no mean feat for the small team organising the eradication project, which is the largest island eradication yet attempted for three species. Project manager Keith Springer explained the significance of this project:

"There have been a number of island eradications where there has been an attempt to eradicate these three species, but they were all much, much smaller. The largest successful island eradication for these three species is the French island, St Paul, a relatively small island of 800 hectares in the southern Indian Ocean."



Bait pods being deployed for the baiting depot at Hurd Point on Macquarie Island.

Macquarie Island is 12,870 hectares, it's located 1,500 kilometres south-east of Tasmania and the only access is by ship, with no landing facilities.

The \$24.7 million project, funded jointly by the Australian and Tasmanian Governments, required a significant amount of detailed planning. There were 11 rabbit-detecting dogs to train over a two-year period, 305 tonnes of bait to be sourced, contracts for shipping and helicopters to be secured, and staff to recruit and train.

In late May 2010, the team left Hobart bound for Macquarie Island to begin the operational phase of the project. On board were the tonnes of cereal-based pellet bait, 420 specially built waterproof bait containers loaded with bait packed in 25 kilogram bags, four helicopters, 360 drums of aviation fuel, a range of specialised equipment and about 20 staff.

The Parks and Wildlife Service has recruited some of the world's most experienced hands in the eradication business and the majority of them are from New

Zealand. When the baiting is complete a total of 11 highly trained dogs will travel to the island with their handlers and along with experienced hunters, begin the task of removing the estimated five percent of rabbits that survived the baiting.

It will be painstaking work, particularly as the rabbits diminish and become harder to locate. This part of the job, including monitoring, will take up to five years before the island is declared to be free of rabbits.

After that, it's up to Mother Nature as natural ecosystems begin to function free of the pressure of these introduced species for the first time in more than 100 years.

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Farewell to Tasman Island's feral cats



Michael Johnston of Victoria tracks signals from radio-collared cats while wildlife biologist Dr Sue Robinson and her cat-detecting terrier Clay look on.

It's a rugged speck of land off Tasmania's most spectacular coastline and for decades there's been a largely unseen slaughter taking place through most of the year, with feral cats killing Tasman Island's seabirds in their tens of thousands.

On 3 May 2010, the pendulum began to swing in favour of the native birds and other species being ravaged by the cats. An aerial and ground baiting program began, followed immediately by trapping, hunting and monitoring by remote cameras by staff from the Department of Primary Industries, Parks, Water and Environment, with the help of colleagues from the Victorian Department of Sustainability and Environment and dedicated volunteers.

Their objective was simple: remove every last individual cat and thereby begin to restore the island's ecosystem. The cats were having an enormous impact on the island's sea birds, feeding almost exclusively on fairy prions and short-tailed shearwaters, killing an estimated 50,000 each year, along with occasional forest birds, lizards and insects.

Following the aerial baiting, rotating teams of up to six people were on the island, putting maximum pressure on the surviving feral cats. Traps were set along pathways that have been regularly mown to encourage use by cats and in the caves and crevices of the steep boulder fields that ring parts of the island. The efforts concentrated on trapping in the first few weeks following baiting with experienced hunters on hand to humanely dispatch trapped cats.

Cat numbers plummeted very rapidly following the intensive effort on the 120 hectare island and no cats, signs of cats or fresh bird kills were observed only 12 days after the baiting effort. On 28 May, DPIPW wildlife biologist Dr Sue Robinson and her two cat-detecting dogs, terrier Clay and labrador Shark travelled to the island. The dogs put their finely trained noses to the test, combing most accessible areas of land in an effort to detect any surviving cats. After five days, only one dead cat was located, however an eye shine from a cat was later detected by spot lighting.

Hunting teams will now return to the island in an attempt to locate and remove the cat, while also trying to determine whether any further cats are present. Experience elsewhere has shown the last few cats can be extremely difficult and time consuming to locate and remove from islands. Once the final cat is believed to have been removed, periodic visits to conduct monitoring will occur and remote cameras will remain in place for approximately 12 months to confirm that eradication has been achieved. The project is a cooperative effort between WILDCARE Inc through the Tasmanian Coast Conservation Fund, the Parks and Wildlife Service and the Resource Management and Conservation Division of DPIPW. Eco-cruising pioneer Rob Pennicott of Bruny & Tasman Island Cruises was a co-founder of the Tasmanian Coast Conservation Fund and has given \$65,000 to the fund for the Tasman Island Project. In May Mr Pennicott donated \$35,000 to the fund, bringing the total of his contribution to coastal conservation projects to \$100,000.

Frenchmans Cap track upgrade

A big summer of track work on the Frenchmans Cap Track has seen extensive track clearing, steps installed, new duckboard and double-planking, along with maintenance to bridges and Vera Hut.

The Frenchmans Cap Track is being upgraded thanks to the generosity of Australian businessman, Dick Smith. In 2008 Mr Smith, a frequent visitor to Tasmania, walked the track and as a result decided he would like to contribute to a track upgrade.

He has committed \$100,000 per year for 10 years to the WILDCARE Gift Fund for this purpose. In turn, the Tasmanian Government has committed to contributing \$50,000 each year for the same period. The WILDCARE Gift Fund recently received Mr Smith's third cheque for \$100,000.

Last year, the Frenchmans Cap Walking Track Management Plan was produced to provide strategic direction for the track's upgrade over the next 10 years. The major recommendation of the plan included construction of new track in a re-route of the southern section of the notoriously muddy Loddon Plains. While environmental approvals for the re-route are finalised, much needed maintenance was completed during the 2009/10 season.

Queenstown senior ranger Sandra Beams said the works concentrated on the first section of track from the Franklin River crossing to north Loddon Plains. Extensive brushcutting and vegetation pruning was completed along four kilometres of track. Drains were cleared, water bars and steps installed and hundreds of metres of duckboard and double planking constructed. Maintenance was also completed at the Loddon River footbridge.

"The work over the last two seasons has cleared the backlog of maintenance required on the track. It's been greatly improved and has given us a solid platform for the seasons to come," Sandra said.



A mini-excavator and power wheelbarrow in action on the Frenchmans Cap Track works.

Meet the Aboriginal trainee rangers

Five new Aboriginal trainee rangers were welcomed to the Parks and Wildlife Service (PWS) in February 2010.

PWS general manager Peter Mooney said it's important that we have indigenous staff with the training and competencies that will enable them to move into management positions within the PWS.

"My vision is that some of these rangers will one day be in charge of our parks," Peter said.

"They bring to our workplace welcome diversity along with new insights and life experiences, which will be appreciated by PWS staff.

"This is also a logical step along the road to having co-management of our parks with the Aboriginal community, and these well-

trained staff will be invaluable in helping us move forward to meet that objective."

The four year training program is jointly funded through the Australian Government's Working on Country – Regional program and the PWS. The trainee rangers will have the opportunity to complete Certificate III or IV or to obtain a Diploma of Conservation and Land Management.

The trainee rangers are Cindy Pitchford (Flinders Island), Nick Jones (Ulverstone), Shannon Mansell (Tamar), Sky Maynard (Derwent) and Hayley Robertson (Derwent). Cindy Pitchford is not new to the service as she was previously a trainee field officer at Flinders Island.

The trainees received a comprehensive induction to the PWS including a tour of



The Aboriginal trainee rangers are (at back from left) Shannon Mansell, Cindy Pitchford and Nick Jones and at front Hayley Robertson and Sky Maynard.

Aboriginal heritage sites around the State in conjunction with Aboriginal Heritage Tasmania staff.

Partnership helps preserve high country heritage

The official opening in March 2010 of two newly reconstructed bridges on the historic Warners Track in the Central Highlands attracted an enthusiastic crowd of more than 100 people who trekked into the site from either Pine Lake or Jackeys Marsh. They demonstrated the strong connection the community has with its high country heritage.

The reconstruction of the bridges was a partnership between the Mountain Huts Preservation Society and Parks and Wildlife Service. The opening celebrated the completion of the reconstruction of two bridges crossing Burnies Creek over a period of two-and-a-half years. Warners Track traces its origins back to the late 1800s when it provided the main access for moving stock from Deloraine, through Jackeys Marsh to the Midlands and on to Hobart and West Coast. Both original bridges washed away in 1997.

While track maintenance isn't the usual focus for the Mountain Huts Preservation Society, the group recognised that the track was integral to the cultural heritage of the high country and were keen to ensure its preservation. A total of 15 working bees, totalling 528 volunteer hours, were required to complete the project.

Mountain Huts Preservation Society president Roger Nutting told the crowd



One of the two new bridges on Warners Track.

gathered at the major bridge for the opening that the day was 'a very, very special occasion'.

"In the early years we had a rocky relationship with the Parks and Wildlife Service, and I'm pleased to say that that's no longer the case, in fact here we are today, building bridges," Mr Nutting said.

"We wanted to rebuild the bridges in a manner sympathetic to the character of the mountains and that's what has been achieved. It's got the look that we aimed for, but with the integrity to last for a long, long time."

Parks and Wildlife Service Parks and Reserves manager Chris Emms, said the reconstruction of the two bridges was achieved through a collaborative working arrangement between the PWS and the Mountain Huts Preservation Society.

"Supporting volunteering has become a major part of our core business and the contribution that volunteers can make in assisting PWS with the ongoing management of reserves is enormous," Mr Emms said.

The Mountain Huts Preservation Society was formed 22 years ago to preserve the remnants of Tasmania's high country heritage. Past projects include the restoration of Trappers Hut in the Walls of Jerusalem, the rebuild of the Ironstone Hut at Lake Nameless, the rebuild of the Lady Lake Hut on the Western Tiers and the maintenance and reroof of the iconic Dixons Kingdom hut in the Walls of Jerusalem. The group is currently well into the restoration of the Basil Steers snaring hut on the February Plains. The society is about to embark on extensive restoration work at the historic Steppes site in the Central Highlands in partnership with the PWS. Also planned is the restoration of a snaring hut used by Ray 'Boy' Miles on private property at Liena and its eventual relocation to Pioneer Drive at Mole Creek.

Society president Roger Nutting said new members are always welcome to join in and help to continue the society's important work. Enquires may be made by contacting Mr Nutting on 6362 3538 or secretary Ian Hayes on 6427 9895 (email ian.hayes@eftel.net.au).

Fact file: Macquarie Island World Heritage Area

What

Macquarie Island is part of Tasmania and is a nature reserve. It is a UNESCO Biosphere Reserve and is listed on the Register of the National Estate. It was declared a World Heritage Area in 1997.

Where

Macquarie Island is about 1,500 kilometres south-east of Tasmania, about half-way between Tasmania and Antarctica at about 55 degrees south. The island is approximately 34 kilometres long and 5 kilometres wide at its broadest point, and has a land area of 12,800 hectares.

Highlights

Macquarie Island's abundance of birds and animal life was remarked upon by early explorers, including Douglas Mawson, who commented it was a wonderful little island. This outstanding abundance of wildlife is a result of the island's location just north of the Antarctic Convergence, a zone where cold Antarctic waters from the south mix with relatively warmer sub-Antarctic waters to the north. This mixing encourages the growth of marine plant life, which in turn supports an increased numbers of animals. The island's location in a vast ocean means it's an ideal breeding ground and resting place for seabirds and marine mammals.

Macquarie Island is home to as many as 100,000 seals and about 3.5 million seabirds which arrive on the island each year to breed and moult. Most of the seabirds are penguins, with the endemic royal penguin being the most numerous of the four breeding species. Among the most spectacular of the bird species to inhabit the island are four species of albatross.

Sunny weather is not one of the island's highlights as fog, rain, sleet and snow showers and strong winds are all part of the Macquarie experience, with about 300



Royal penguins. Photo: Noel Carmichael



Elephant seals on Macquarie Island. Photo: Noel Carmichael

days each year delivering some form of precipitation.

Geology

Macquarie Island is a geological wonder and its unique geological values are the main reason for its World Heritage Listing. It is the only island in the world composed entirely of oceanic crust and rocks from the mantle, deep below the earth's surface. Unlike other sub-Antarctic islands which have been shaped by glaciers, Macquarie Island has mainly been shaped by marine processes such as wave action.

Activities

There are no permanent residents on Macquarie Island; however the Australian Antarctic Division has operated a scientific station there since 1948. The only access to the island is by sea and there are no harbours or landing facilities. Ship traffic in the area is minimal although the island is visited by educational tourist ships each summer.

Educational tourism to Macquarie Island is limited to about 1,000 visitors each year. Tourists may land at only two places on the island (Sandy Bay and the Isthmus) and Parks and Wildlife Service staff oversee all visits to ensure that environmental impacts are minimised.

Strict biosecurity measures aimed at preventing exotic species being introduced to the island are in place for all visitors to the

reserve. Visitors going ashore are required to use washdown facilities and disinfectant to ensure that all their clothing and equipment is free of soil pathogens, animals or plants.

Become a Parks Facebook fan

There doesn't seem to be much middle ground where people's opinions of Facebook are concerned – people either love it, hate it or have never even visited the site. But there's no denying its superiority among the social networking sites.

PWS has had a Facebook site for several months and now has over 720 fans, with more joining weekly and some contributing spectacular photos from their visits to various parks and reserves.

The Facebook site is a great way to stay in touch with what's happening in Tasmania's parks and reserves, including via the blogs and photos from the eradication team on Macquarie Island.

We welcome your comments, suggestions and photos. Check out the Parks Facebook site at <http://www.facebook.com/pages/Tasmania-Parks-and-Wildlife-Service/147512044296?v=wall>