

## 15 Community Response - Conservation Initiatives

There is substantial support throughout the island for protecting and enhancing the natural environment. This is shown clearly in both the activity and number of environmentally-focussed groups on the island, and in the research and surveys.

### Research and Surveys

#### **Petscan**

A comprehensive survey, of domestic cats and dogs on Great Barrier Island, was designed by Tony Bouzaid and undertaken by independent researchers from the University of Auckland, in 1998. The survey represented 59% of the adult residents of the Island (494 residents 16 years and older). Respondents generally recognized the problem of stray and feral cats and 67% thought that the local community should formulate a cat management plan. The Department of Conservation and Auckland Regional Council were also seen as having responsibilities to control feral cats. The survey indicated that feral cats were sometimes ‘domesticated’ while still interbreeding in the wild and that in some cases domestic cats were abandoned to go feral.

Eighty nine percent of respondents favoured trapping and humane disposal of stray and feral cats. There was also strong support (80%) for the de-sexing of domestic cats. Interestingly cat owners were asked how many of a list of animals their cat had ‘brought home’ in the last four weeks. The answers indicated that the majority of kills were rodents; never-the-less lizards (5%) and native birds (4%) were noted. Extrapolating from these figures – which are likely to be minimal - indicates that 150 domestic cats alone kill c. 2800 rodents, c. 200 lizards and c. 200 native birds each year. As the domestic cat population is much smaller than the feral cat population (which relies entirely on food caught in the wild), these figures give an indication of the role of cats in both rat control and the annual destruction of native fauna<sup>1</sup>.

Asked what animals other than cats caused them any problems, 58% of respondents named rats and 37% dogs. The majority of respondents (83%) supported the need for a dog management plan on the Island. There was clear support for the trapping and humane disposal of stray dogs, de-sexing, identification and recording, and confinement at night. There was also strong support (64%) for bird aversion training.

#### **Recent independent social research by CRESA**

The Centre for Research, Evaluation and Social Assessment (CRESA) worked with the community during 2005 to develop a shared vision for Great Barrier Island. Their objectives were to define the values of the island (natural, social, cultural and recreational), to identify stakeholders’ aspirations for the island, and to define principles for development.

CRESA researchers carried this out in a comprehensive manner using census statistics and past reports, interviews and surveys of on-island residents and off-island property owners, and focus groups and workshops with various interest groups both on and off the island (including local and central government officers in Department of Conservation, the Auckland Regional Council and Auckland City Council). They invited the community to drop-in sessions to view the draft report and discuss any points with them. The final report and vision statement became available in 2006.

CRESA found that environmental protection and pest eradication were definitely on the list of priorities for many Barrier residents (see highlights below); the main elements of a sustainable and planned future for the island were given as follows:

- A stable population base (including a sustainable demographic structure);
- Infrastructure and services that meet the needs of local residents and visitors;
- A viable economy and job opportunities;
- **A restored and pest free natural environment;**
- Protection of Maori and Pakeha cultural heritage values;
- **Protection of natural environment, including coastal and marine environment;**
- Preservation of the existing community character;
- Availability of a range of recreational opportunities;
- Community-led development supported by a cooperative approach by the key agencies<sup>ii</sup>.

#### **Great Barrier Island Charitable Trust (GBICT) survey**

The Great Barrier Island Charitable Trust carried out a ‘referendum’ in early 2006 asking whether they had the support of the residents and ratepayers to continue with its concept of a rat and feral cat-free island. Of the replies received (24% response):

- 90% said “yes” to the issue of working towards the elimination of feral cats
- 93% said “yes” to explore the ecological and economic benefits of eradicating rats<sup>iii</sup>.

#### **Windy Hill telephone survey**

Prior to the GBICT ‘referendum’ above, the Windy Hill Rosalie Bay Catchment Trust had commissioned a professional researcher late in 2002 to ask one hundred Barrier residents and ratepayers about the idea of a rat and feral cat eradication for the island<sup>iv</sup>. The response was highly positive:

- 96% uptake to answering the survey questions
- 94% “yes” to the question ‘do you think there are benefits to the island being rat and feral cat free?’

When questioned about the nature of these benefits, 75% saw the main benefit being increased native birds / animals with one-third associating this with increased tourism or employment.

The survey showed that many people are already actively engaged in rodent control and estimated a spend of \$20,000 annually, commenting that this is in addition to the many thousands of dollars spent on the pest management projects at Windy Hill, Benthorn Farm, Kaitoke, Awana, Glenfern Sanctuary and Schooner Bay Farm Co. Ltd. (Note there is also substantial government department and local authority expenditure on pest management).

### **Tiritiri Matangi trip surveys**

The Great Barrier Island Charitable Trust's questionnaire (carried out during its trips to Tiritiri Matangi (Fig 15.1) in late 2005 and early 2006) revealed that the environmental values of greatest importance to islanders are: bird life, vegetation restoration and saving endangered species. The economic aspects of pest eradication are either not fully appreciated or are seen as secondary<sup>v</sup>. Taken with the telephone survey results earlier, perhaps this suggests that the island residents want to protect the Island biodiversity for its own sake, not for economic benefits arising from increased tourism.

Fig 15.1 First trip by local people to Tiritiri Matangi in 2005



### **Environmental Covenants**

#### **QEII covenants**

There are seven Queen Elizabeth II Trust (QEII) covenants on GBI protecting a total land area of 358.68 ha over 11 blocks as indicated on the map (fig 15.2).

Fig 15.2 QE II Covenants on Great Barrier (Google map).



The largest covenant is 137.15 ha (3 blocks) and the smallest is 6.35 ha. The mean size is 51.24 ha. Each covenant was approved based on particular values (ecological, biodiversity, landscape, geological/soils, cultural etc). QEII are also guided by the Statement of National Priorities for protection on private land<sup>vi</sup>.

**Auckland City Council covenants**

Neither Auckland City nor Land Information New Zealand could provide data on the total area of covenanted land or number of covenants held. There are large numbers involved as this is the mechanism used to secure biodiversity outcomes at resource consent, and they are not identifiable without a manual search. This implies that there is little monitoring on the state of these covenants. A recent study for the Thames District Council showed that 60% of their covenants were not in ‘good’ condition<sup>vii</sup>.

**Environmental Groups and Current projects**

**Community Groups**

Eight community-based, and one mainly off-island-based, environmental groups work on projects on the island (fig 15.3), providing employment for about 14 people (Table 15.1). In addition, these projects and some other private initiatives not shown here, also periodically employ Island companies in planting, fencing, road construction and other activities.

Fig 15.3 Current community conservation initiatives on Great Barrier Island (Map by Kelvin Floyd, Te Ngahere Native Forest Management).



Table 15.1 Environmental projects and direct employment.

Group	Projects	Part or full time employees	Trustees and volunteers
Awana Catchment Trust	Protecting threatened species and their habitats in the Awana area.	3 part time	3
Great Barrier Island Charitable Trust	Promoting a rat and feral cat free Great Barrier Island in order to reintroduce species and help build an economic framework for the future.	3	6 Trustees 70+ Volunteers for bird counts. c. 123 Members
Glenfern Sanctuary Trust	Providing an eco-experience and an example that others may follow. Have recently re-introduced North Island robin and just completing a pest proof fence.	2	4 Trustees 6 Volunteers
Kaitoke Beach & Wetlands Pest Management Project	Feral cat and rat trapping; NZ Dotterel monitoring and recording at Kaitoke Beach; wilding pine & other exotic tree felling; general weed eradication.	unknown	Private initiative currently inactive
Medlands Beach Care Group	Established "to preserve and enhance the cultural and natural environment of the Medlands Beach area". Developed "Medlands Beach Landscape Management Plan" as their blueprint.	0	Quiet at present. 52 attendees at last meeting in Dec 06
Mohunga Restoration Inc Soc	Preserving native flora and fauna on Mohunga Peninsular; reforestation & predator and pest control.	Occasional part-time	25 members
Motu Kaikoura Trust	Eradicating introduced pests to provide native Flora and Fauna species with a safe haven and developing facilities to accommodate volunteers, scientific researchers, youth, day visitors and a range of outdoor interest groups.	1 full-time, 1 part time	18 Trustees (all off the island) 63 members
Schooner Bay Farm Co. Ltd.	Weed eradication; cat cages.	3	3 volunteers 5 shareholders
Windy Hill Rosalie Bay Catchment Trust (including Benthorn Farm)	Removing invasive plants and animals from 750 ha of privately owned land on south eastern catchments. Reintroduced North Island robin 2004	6	3 Volunteers 4 trustees

### Pest Management

There are a number of community conservation initiatives to manage pests down to low densities:

- Okiwi School manages an area of significant bush adjacent to the school.
- Windy Hill Rosalie Bay Catchment Trusts has an integrated pest management programme over 620 hectares.
- Mohunga Peninsula Group also has an integrated pest programme.
- Mulberry Grove Community Rat Project commenced in 2009 over 96 properties and of course, most Barrier households are engaged with managing rats on their properties.
- Pest Eradication has been carried out on the Kotuku Peninsula which is protected by a pest proof fence and contains Glenfern Sanctuary and Orama.
- The Motu Kaikoura Trust is in the process of eradicating nine pest species, including fallow deer from Motu Kaikoura.

### Conservation Education

There is a growing interest in conservation education on Great Barrier Island, at Orama, Motu Kaikoura and Awana. Generally at present off-island school or university groups are largely staffed by off-island teachers, but there is economic spin-off in accommodation, catering and transport. Also, as these courses usually involve young people, their importance for future tourism may be considerable. Since 2003 the Great Barrier Island Charitable Trust has held lectures and workshops for the community with invited speakers, and Northland Polytech runs horticultural and other courses. Ngati Rehua has also run sponsored educational courses at the Moteirahei Marae.

A quarterly newsletter is distributed to every resident and ratepayer by the Great Barrier Island Charitable Trust. (Fig 15.4a)

Fig 15.4 (a)Quarterly newsletters being packed for Great Barrier Island Charitable Trust mailout. (b) bird counters having breakfast after an early rise.

a.



b.



### Cat Spaying Programme

From 2004 to 2009 the Great Barrier Island Charitable Trust Petscan programme offered subsidized cat spaying or neutering to the community. This was a continuation of a programme run by the Hauraki Gulf Island Charitable Trust. A total of 244 cats were spayed over a 10 year period.

### Restoration

The North Island robin was re-introduced to Great Barrier Island at Windy Hill and Glenfern Sanctuary in 2004. A booster population of robins from Mokoia Island was added in March 2009. Over 100 juvenile robins have fledged since the first introduction but most of these have dispersed outside the protected areas where they will not have a high survival rate due to predation by rats and feral cats.

Chevron skinks have been returned from Auckland Zoo to protected areas following treatment from predation wounds.

### Bird Counts

The Great Barrier Island Charitable Trust has carried out bird counts since 2006, and counts have been made at Windy Hill since 2000. Kaka counts have been made in conjunction with mainland based counters (see Chapter 13). Comprehensive reports are available. Species

diversity is lowest in kanuka and montane forest, and greatest in the paddocks where introduced species mostly occur.

### **Marine Reserve application**

A marine reserve application covering 49,500 ha on the eastern coast was submitted by the Department of Conservation in 2004 and approved by Minister of Conservation in 2005. As required under the Marine Reserves Act 1971, the minister then sought the agreement of the Ministers of Transport and Fisheries. The Minister of Transport endorsed the Reserve in 2006 and the Ministry of Fisheries undertook further consultation with iwi and island residents in 2007. Finally the Minister of Fisheries declined the application late in 2007 saying:

*“Balancing marine protection and these varied interests requires careful consideration. The way forward is to use the Marine Protected Areas Policy and Implementation Plan (MPA Policy) to explore further protective measures around Great Barrier Island and the northeast bio-geographical region that extends from the tip of the North Island to East Cape.”*

The Minister said the many views expressed at his meetings with Great Barrier Island residents, hapu and iwi made it clear there was support for marine conservation.

*“However, they want this balanced with their uses, interests and aspirations for Great Barrier Island. I believe the MPA Policy approach will have their support.”<sup>viii</sup>*

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i About 160 feral cats are currently shot each year at Okiwi, Awana and Windy Hill. These areas comprise c. 22 km<sup>2</sup> which is c. 9% of the Island. Assuming that the remaining 91% has a lower cat density of c. 4 cats/km<sup>2</sup> (the mean catch at Windy Hill 2004 – 2008), we get an additional population of 4 x 252 = 1008, for a total estimate of 1168 feral cats on Great Barrier Island.

ii CRESA, *Draft visioning statement*, 26-10-05

iii GBICT Trustees, *The ‘GBICT Referendum’, a response from the Trust*, Environmental News, Issue 6 Autumn 2006, p1

iv Windy Hill Rosalie Bay Catchment Trust, *Telephone Survey on Rat and Feral Cat Eradication On Great Barrier Island*, 2003

v John Ogden, *Tiritiri Matangi Trip – Synopsis of the Questionnaires*, GBI Environmental News, Issue 5 Summer 2006

vi Queen Elizabeth Trust, pers comm., 2008

vii Hauraki Gulf Forum, *State of the Environment Report*, June 2008, p59 quoting P&R Stewart 2006

viii *Minister of Fisheries declines application for Marine Reserve at Great Barrier Island (Aotea)*, Jim Anderton, 15 May, 2008, [www.beehive.govt.nz](http://www.beehive.govt.nz)