



February 2009

FRIENDS OF MANA ISLAND INC

FOMI Newsletter 38

P O Box 54101, Mana, Porirua

Special points of interest:

- AGM
- Furniture wanted
- Water tank monitoring
- Science on Mana Island
- News
- Volunteer opportunities
- Committee

President's Editorial

The announcement by the Government on 11 February that an Agreement in Principle between the Crown and Ngati Toa on the Treaty Settlement negotiations had been reached served to remind me that there is a third party involved in the restoration and management of Mana Island – the tangata whenua.

In this role, and also that of kaitiaki (guardians) of the island, Ngati Toa have also been actively involved in many of the conservation initiatives of the island. Some of the translocations would not have occurred without their active support and participation. I wish to thank them for this.

This special relationship between Ngati Toa and the island has been formally recognised by FOMI through the iwi having representation, as of right, on the Committee. Currently, they are represented by Aka Arthur (as kamatua) and Tama Coker.

We look forward to this relationship continuing into the future and wish both Ngati Toa and the Crown well in their continuing negotiations towards a Deed of Settlement.

Colin Ryder

Annual General Meeting

Notice is given that the next Annual General Meeting of the Friends of Mana Island Inc (FOMI) will be held at the Mana Cruising Club (MCC) on Wednesday 18 March 2009 at 7:30 pm.

The purpose of the Meeting is to present the Annual Report and the Accounts for the Y/E December 31 2008, and for the election of Officers.

This is your opportunity to serve on a Committee which is committed to action on the restoration front. Nominations from the floor will be accepted, but if you have an urge contact Colin or Brian.

Following the Meeting Chris Munn will give an illustrated talk on his recent trip on the "Breaksea Girl" in Southern Fiordland.

All Members and prospective members are cordially invited. Supper will follow.

Breaksea Girl runs eco tours in Fiordland for up to twelve persons at a time and part of the proceeds of each tour are donated to conservation projects in the area. (check out Fiordland Ecology Holidays).

The Karaka Invasion.

Long time volunteer Allan Corry has written to the Editor in an endeavour to get some help to fill his very large boots and join in the war he has been waging in keeping the Karaka Grove under some level of control on Mana. Allan has a very strong view on the impact of the existing Karaka canopy and the need to keep the annual regeneration under control. He has, as far back as 2006, written of his concerns to the DoC Waikanae Office and has yet to see a reply. Allan's exceptional ability in seed collection on the mainland is vital to the continuing planting under the canopies on Mana.

Allan's plea is whether there is someone out there who would be willing to take on his role for the future. He would be prepared to fully train a volunteer, give him access to all his wealth of knowledge of the best seed trees between Colonial Knob and Karehana Bay. Allan is a knowledge base we can ill afford to lose.

If you have an interest contact the editor in the first instance.

Water tank Monitoring System for Mana Island. Allan Sheppard, Committee Member

FOMI has installed a wireless monitoring system for the 5 water tanks used for the islands houses, nursery and fire protection.

Previously the system relied on DOC staff noting the position of the float markers as they traveled along the tracks. Two of the tanks are not visible from the tracks and are only visited if problems are being investigated. In November 2007 the fire tank was found by chance to be at a low level.

As the nursery was propagating large numbers of plants ~9000 for 2008, ~14,000 for 2009 there was a large investment in time and money involved should the water supply fail.

Following some investigation into suitable monitoring systems available in NZ and overseas a system from Anatec Labs, based in Queensland, Australia was chosen. This consisted of 5 tank units, a relay station and a display unit. Initially (Oct 2008) the

system was battery powered but it was decided to replace the lantern batteries with solar panels charging lead acid batteries to reduce the maintenance requirements. This system complements the water pumping system which is also solar powered.

A relay station was necessary as the radio telemetry frequency is line of sight and none of the tanks are visible from the office where the display panel is situated. A suitable site was found to the east of the fire tank and can be seen on the skyline north of the houses.

Since installation the island staff now have 10 minute updates of the tank levels.

The solar panels were installed in February 2008. The total cost was \$4,345 of which \$1,500 was from the Ron Greenwood Environmental Trust.

Thanks to Grant Timlin, Vince Waanders and Ian Goodwin for assistance during installation.





What science's happening on Mana Island? Colin Ryder

I mentioned in the last Newsletter that Colin Miskelly from DOC had prepared a nomination for Mana Island being recognised as one of Australasia's twenty top ecological restoration project and there was enough good information provided to form the basis of a number of articles. In the second of these, I will concentrate on the value of the island from a scientific point of view. Mana Island is a great natural laboratory for scientists for a number of reasons and it's good to see it's fulfilling a more and more important role in this regard. Of course, every good ecological restoration programme should be based on a good restoration plan which is based on good science and Colin has really delivered the goods for Mana Island. After some initial nagging by Forest and Bird and several years of endeavour the Mana Island ecological restoration plan was published in 1999. He drafted this seminal document using the then available information on biogeography, biotic community structure, habitat requirements, and interspecific interactions. (Whatever that all means). The plan placed considerable emphasis on identifying the most appropriate source populations for faunal and floral re-introductions.

Anyway, I found a very lucid and readable document – not bad for a scientist. You can find it on www.doc.govt.nz/upload/documents/parks-and-recreation/places-to-visit/wellington/mana-island-restoration-plan.pdf.

Students from Victoria University have also made good use of the island.

For five years from 1994 students in the Masters in Conservation Science class visited the island as part of their course work, to assess growth rates and survival of plantings, and to measure the effect of revegetation on plant, invertebrate and lizard communities.

There has also been a succession of post-graduate theses undertaken on the island, including: mouse population ecology, studies of establishment of introduced or re-introduced fauna (North Island robin, spotted skink, Duvaucel's gecko, brown teal), interactions between resident and translocated species (pukeko & takahe, goldstripe gecko & Duvaucel's gecko), factors affecting takahe productivity, genetics of translocated brown teal populations, seed dispersal by common geckos and by roosting starlings, and, of course, Holly's work on determining whether restoration of seabirds has a measurable effect on marine-sourced nutrient input to terrestrial ecosystems. Globally, Mana Island has been the single most important research site for petrel re-introductions with 3 species and 704 individuals.

What lessons have been learned?

Introduced rodents (and, importantly mice) can be eradicated from islands over 200 ha.

A comprehensive ecological restoration plan has been invaluable to guide effective collaboration between the central government managers of the island (DOC) and a dedicated com-

munity restoration group (FOMI).

Homing instincts of burrow-nesting petrels can be overcome by translocating (and hand-feeding) downy nestlings, and providing artificial burrows and simulated colony sounds.

An artificial diet based on sardines preserved in soya oil is an excellent diet substitute for well-developed nestlings of petrels that naturally feed predominantly on either fish or planktonic crustaceans.

Starlings that arrive to roost each evening from the adjacent mainland were not major dispersers of seeds of invasive boxthorn and boneseed (neither species was identified among 42,093 seeds collected under starling roosts). (What an effort!!)

Boxthorn and boneseed can be reduced to low densities and effectively eliminated as components of the coastal shrub community.

Endangered takahe productivity on lowland islands can equal or exceed their productivity in the alpine grasslands of their predator-induced refugia in Fiordland.

Damage to plantings by pukeko (purple swamphen) can be minimised by using drainage-pipe cloches for the first 12 months.

It is important to remember that virtually all of these scientific studies would not have been possible with the tremendous contributions made by volunteers helping with a host of conservation projects.



WHAT'S HAPPENING ON MANA ISLAND? Photos by Allan Shepperd

Snippets from "Pigeon Post"

Grant Timlin, field centre supervisor, has left the Island and DOC. (*we wish Grant and Kate the best and will miss his enthusiastic approach to conservation-ED*)

Three takahe chicks fledged this year are in quarantine pens awaiting transfer to the Murchison Mountains in Fiordland.

Ten large Pateke (Brown Teal) chicks fledged this season.

There are still Tui around and a Kereru made a call this summer.

Sue and Frank arrived back at the end of December with their new baby girl, Heni.

There are currently 34 Shore Plover on the Island, five chicks fledged, and sixteen young birds were released in early February.

Volunteer Opportunities

Weekend planting trips for 30 or more volunteers ceased a year or two ago as the need to fulfil the 20-30,000 trees per annum ended with the completion of the restoration plan in 2007.

The planting requirements were 9,000 trees for last year and estimated at 13,000 for this year. Groups of up to 6 can be accommodated on Monday to Thursday basis in May and June. Transport and accommodation in the Lockwood are provided by DOC, but the groups have to be self sufficient and preferably had some familiarity with planting on the Island.



Lockwood Furniture

Those of you who are or have been regular day visitors to Mana Island, and especially the overnighters, will have made some comments about the standard of the lounge furniture available. Not even up to Salvation Army minimum standards.

Should any of you be disposing of "pre-loved furniture" and want a good home on paradise you could donate it to FOMI. Allan would be happy to receive any donations, email him on "owlet@xtra.co.nz"

Your Committee this year is :

Colin Ryder President, Brian Paget Vice President, Darlene Adams Secretary, Barry Dent Treasurer and a Committee of Brian Bell, Jason Christensen, Ian Cooksley (DoC Rep), Tama Coker (Iwi Rep), Jo Greenman and Allan Shepperd.

To contact any of the above email them at contactus@manaisland.org.nz

For a color version of this Newsletter download one from our web site www.manaisland.org.nz

Editor: Brian Paget

Sponsors: Mana Transport Limited, Porirua

