



FRIENDS OF TAWA BUSH RESERVES Inc
"TAWA BUSH TELEGRAPH"

Newsletter No 37, November 2009 of the
FRIENDS OF TAWA BUSH RESERVES Inc
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DEADLY DEVELOPMENT?

Just when it looked as though New Zealand had learned a few hard conservation lessons, the pendulum began its swing back to a position of 'rest'. This happens in any dynamic area. Especially, it seems, in politics.

Right now New Zealand is undergoing one of these swings - with at least two areas affected: (a) the question of 'climate-change' and (b) the utilization of mineral resources thought to lie within the country's National Parks.

'Climate-change' has become, very quickly, a major worldwide debate. The ramifications of this have yet to be clearly defined. Under Kyoto New Zealand is obligated to reduce emissions to 1990 levels by 2012. So far NZ is over 30 percent above 1990 levels with no indication how it is proposed to close that gap. Mr Key indicated this country's acceptance of the concept of 'climate change'; then negotiated a deal with some special forestry owners allowing very low abatement rates.

Friends of Tawa Bush Reserves has no policy specific to this question. As 'friends of New Zealand's flora and fauna', conservation groups such as FOTBR must have a clearly defined and well-articulated stance on this core issue. The erosion of conservation values not only destroys habitats and eco-systems but also threatens the well-being of the planet on which life depends.

The other hot issue of the day seems interlinked. The utilisation of resources "not at present available for exploitation". Surveys, stock-takes, research of possibilities are being talked of.

Thin ends of wedges spring into mind!

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Prize winning study of fungi in Redwood Bush

Jessie Bird, a Tawa student now studying at Victoria University of Wellington was one of six national winners of the Royal Society's CREST Gold Medal at an awards ceremony in November. The medal is for creativity in research in science and technology displayed or developed from Science Fair projects. Jessie studied the anti microbial properties of fungi found growing in the Redwood Bush and the Colonial Knob Scenic Reserves.

Jessie says, " Many commonly used antibiotics in the world today are becoming ineffective as bacteria develop resistance to them and new, untreatable 'superbugs' emerge. It is therefore important that new medicines are researched and developed to combat these diseases. Penicillin, the first antibiotic discovered is derived from a fungus, and many plants have antimicrobial properties, so perhaps fungi found in New Zealand native bush could also have antibacterial properties and be of use in medical research. This project explored the possibility that fungi could once more be the needed medical miracle."

Eight different fungi species were found and collected during late autumn. The fungi were then identified. A Disk Diffusion experiment was carried out to find if the fungi had antibacterial properties against *E. coli* and *S. Aureus* bacteria. Using the most promising fungi Minimum Inhibitory Concentration (MIC) tests were then used to obtain a quantitative estimate of the strength of the extract from the fungi necessary for antibacterial effectiveness.

Through this series of experiments a fungus with antibacterial properties against two common bacteria was found by Jessie. Her study showed this fungus contains a compound not present in the other fungi she studied, indicating that it contains an individual antibacterial compound.

The Friends of Tawa Bush Reserves congratulate Jessie and her supervising teacher Dr. Suzanne Boniface.

Paul Guiniven, a keen observer of nature, noticed,,,,

A couple of weeks ago I saw a pair of kingfishers (*Halcyon sancta*) flying close to an old tree stump in Takapu Road. Often a solitary bird, I think this pair was nesting in the remains of the tree stump.

Certainly in our neck of the woods, because our bush reserves have been subject to milling in the past, old hollow trees are a valuable commodity for birds. Like the kingfisher or the morepork that nest in cavities. With the success of Kaka at Zealandia it may be possible for our reserves to be visited by them in the future but with limited large tree cavities around they probably couldn't nest here.

An interesting fact about the kingfisher you may not know, is that they are known to eat mice. (Not that any of us ever have mice around our places do we?)

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Tuis are becoming much more plentiful - on the Chathams! 25 years ago there were quite large flocks of tui but the numbers have steadily declined in the last quarter century. Now 14 tui from the offshore nature reserve of Rangitira Island have been released and, according to reports from the Chathams, have begun breeding. The local residents are, as may be imagined, delighted.

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Porirua Harbour is in the news again! Greater Wellington Regional Council has been concerned about the quality of the waters of the Porirua Harbour and also the quality of the water flowing into the harbour. (FOTBR members will be well aware of this concern following earlier discussion of this matter and a visit from Mr Keith Calder the Porirua Harbour Strategy Co-ordinator.) A series of three seminars has been held recently to hear more about the plans. Porirua City has committed \$2.6 million over 10 years and Greater Wellington Regional Council contributes \$650,000 a year to a number of projects within the Porirua Harbour catchment. (FOTBR is interested in this matter as, of course, Porirua Stream flowing through local Reserves, carries some of the pollution, which ends up in Porirua Harbour.)

Activities of other ecological societies especially nearby groups are always of interest to FOTBR. With this issue of *Tawa Bush Telegraph* we take a look at *Friends of Maara Roa* and *Friends of Mana Island*.

1. Friends of Maara Roa. This group is based in Porirua with close associations with a number of schools in that area. They have a well-used nursery which must be a real asset for the work they undertake. They have had a few disappointments (one track has recently been checked out when "the worst ever cattle damage on a Maara Roa track" was revealed) but many more encouragements from the community. *Friends of Maara Roa* has been very involved with tracks and walks. Imagination and enthusiasm ensure interesting involvement for all who wish to have a closer link with the area.
2. Friends of Mana Island. Another group with its base in Porirua but with its focus towards Mana Island out in Cook Strait. FOMI has had to clothe Mana Island with vegetation that was native to the area before farming took over. The result has been that much energy has had to be used on those areas that don't normally concern volunteer groups. DOC has born much of the cost of getting this gem of Cook Strait to its present state. Millions of mice were "eliminated" before it was deemed possible to put endangered species on the island. FOMI provided (and painted) concrete gannets in a project to encourage those birds to regard Mana Island as home. Other endangered species (specifically *Whitakers skinks*) have been sourced from Pukerua Bay area and released on Mana Island. As with volunteers with *Friends of Maara Roa* so with volunteers with FOMI. They have spent a decade planting suitable trees on Mana Island. Now the trees are being allowed to grow at their own pace surrounded by takahe, giant Cook Strait Weta and Whitaker Skinks (there are other endangered species living there too).

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History of Mana Island.

In October Bob Maysmor, the curator of Pataka Museum published a history of Mana Island. *Te Mana o Kupe ki Aotearoa*. At Pataka \$25.