Bush Restoration in the Mangemangeroa by Graham Falla

At the Mangemangeroa Reserve there are quite extensive areas along the upper edge of the existing bush and on the steep slopes that are to be greatly enhanced by a programme of bush restoration. The aim of bush restoration is to restore the health of existing bush, mainly through fencing and control of weeds and pests, and to reclothe cleared land with native plant cover that reproduces, as nearly as we can manage, what was there originally. Simple revegetation commonly does not achieve these ends; it merely covers cleared land with an indiscriminate collection of native plants.

Bush Restoration demands a system that will reproduce the genuine make-up of the bush that is being restored. There are two sides to this. Firstly the genetic stock with its range of species and varietal strains must belong to the local area. An example is kowhai, a prominent tree in the Reserve. No fewer than eight different species of kowhai are grown in Auckland gardens, but only one of these (*Sophora microphylla*) has been identified in the Mangemangeroa bush, and the local trees seem to have some special features that may need more research. We therefore limit our seed collecting to the local area. This system is called ecosourcing. Secondly we should aim to establish the right plants on the right sites. The surviving bush contains the clues, for example:

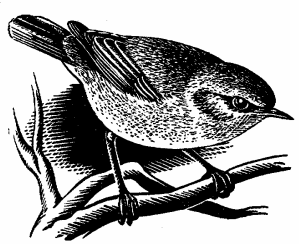
Damp gullies: taraire, puriri, kohekohe, karaka
Drier slopes: totara (possibly kauri)
Steep or exposed faces: pohutukawa
Coastal edge: karo, flax
Open canopy and bush edges: kowhai

To start with, especially on the harsher sites, a nurse cover of manuka or kanuka helps the major canopy species and shade-loving undergrowth to establish. In addition karamu, with its fast growth and berry crops, will attract and feed birds which bring in the seed of other forest plants. Some authorities argue that the nurse cover is where bush restoration planting should stop: let nature do the rest over the course of 50-100 years. At Managemangeroa we prefer to take the process further for the sake of a much earlier result.

Anyone who would like to contribute to this programme is welcome to do so. Manukau Parks has allowed a small number of nominated collectors to gather seed and forest duff (sifted from the leaf-litter in the bush) in the reserve, which we want to use as our main seed source. Germinating and raising plants from an original source takes some commitment, but can be an absorbing activity. We can arrange to supply seed and/or forest duff, complete with cultural directions, Please phone Jim (534 7851), Sally (534 6196), Jessica (534 7415), or Graham (276 3092). If you are fortunate enough to own a piece of natural bush on the eastern side of Howick or in the Mangemangeroa catchment, this also could provide your own ecosourced seed or forest duff from which to raise plants for Mangemangeroa.

Bird of the Season: Riroriro or Grey Warbler by Graham Falla

Riroriro (*Gerygone igata*), at only 11cm long, has the distinction of being the smallest of the birds living in the Mangemangeroa bush. It is also one of the most vocal, being heard more often than it is seen. That is not to say that it likes to be hidden.
If we bring to the bush a squeaky bird caller or a piece of dampened polystyrene to rub on glass, riroriro is usually the first bird to answer the call by coming to make a close but courteous inspection, allowing us in turn to get a good look at its softly coloured plumage in shades of grey. A finely-formed black beak and tail that spreads to show a dash of black and white complete the outfit.

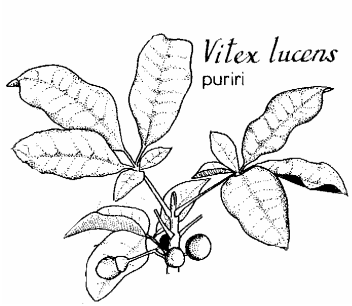


The name riroriro mimics the sound of its song, heard at its best in early spring and early autumn. Listen for a clear and well-projected musical trill which sometimes is given only in fragments, but often is repeated continually. The bird is constantly on the move while it sings, fluttering in and about any leafy canopy in search of its diet of insects and spiders.

Riroriro are dedicated parents, the female taking great pains to build a nest (with materials gathered by the male) that will be a secure home in which to raise a family of up to six and then house an uninvited guest. The nest, lined with feathers and complete with domed roof and entrance hole in the side, is finely woven and securely fastened top and bottom to the branchlets of a supporting tree. After the first brood is fledged in September the parents must then prepare to lavish all their care on incubating an egg laid in passing by a shining cuckoo and raising its chick. The warblers may then raise another brood of their own as late as January.

Unassuming but not insignificant, the little grey warbler has adapted more successfully than most native birds to huge changes of habitat. Though not forming flocks, it is relatively common in both wild and cultivated surroundings throughout the country.

Plant of the Season: Puriri: *Vitex lucens* by Sally Barclay



Puriri are found throughout the reserve. Specimens range in age from seedlings to ancient specimens. One giant puriri along the northern part of the track has boughs which have collapsed but still continue to grow providing considerable canopy cover. When the grey warblers sing from this canopy their song reverberates as though in a perfectly built acoustic cathedral. Another puriri, below the trig, provides a home for the native bees. As well it supports a large climbing red rata *Metrosideros fulgens*
A most attractive feature of these old trees is the gnarled and puckered bark which give the appearance of “old, scrawny faces” etched on the trunks. These patterns form round the holes in which the puriri moth, along with spiders, find a home.
Puriri leaves are a most attractive shiny green, somewhat wavy in appearance. They are arranged in a hand-like pattern; three large leaves and two smaller ones coming out from a central “stalk”.
The puriri wood is particularly strong and durable but because of its irregular grain is not easy to work. It was a wood favoured for the bread ovens of Howick by the early settlers.
All year round the pink flowers of this tree may be found. Once fertilized these flowers develop into the red berries (abundant this January) which later form a very tough outer coating. Evidently the early horticulturists gathered their puriri seed, after race day, from beneath the puriri lining the drive into Ellerslie race course. This reduced the need for scarfing (cutting) of the seed coat as the race traffic had already achieved this! Scarfing allows the water to enter the seed to start germination. Now it is usual to soak the seed and then cut the seed coatings with a sharp knife to ensure germination.

55 years in the Mangemangeroa as recounted by Jim Duckworth

Growing up in a rural area offered Jim and his brother the opportunity to explore the Mangemangeroa estuary, fish in it, build rafts and to observe country life.
Jim remembers the dump (on the South side of the present bridge across the valley) as a source of some wonderful "treasures". One of the best boyhood finds was the float from a float plane to which, with lots of enthusiasm and effort, a keel was attached. This now proved an absolute gem of a boat which took them down to the Shelley Park sandspit on the outgoing tide, and up again on the incoming!
One aspect of the dump was the abundant supply of used car tyres which found their way into the estuary; Jim recalls how these made excellent homes for eels. One eel curled up in each tyre!
As a boy, catching sprats was a favourite pastime. These moved in heavy shoals up the estuary beyond the bridge. With the aid of an old wire mattress he and his mates set about catching sprats. Unfortunately the mattress proved an excellent sprat trap and their plan turned to disaster when they realized that they had far more sprats than they could carry. They had to set about throwing sprats back!
Life for some people was not easy. The 13 baches along the foreshore below Pokutukawa Ave receive very little sun during the winter months. Jim recalled how his friend's mum rowed across the creek to Fowells Point to peg her washing on the fence and rowed back to collect it once dry!!
Life was not all playing in the creek; Jim's mum had a love of the bush and planted a variety of both native and introduced species on their life style block. The pohutukawas were planted by her in the 1950's, as well as some of the oaks seen today. This love of trees was encouraged in young Jim and as a boy of 14 he planted a nikau on the property. In later years when building the tennis court Jim's nikau was on the edge. Rather than remove the nikau the retaining wall required a "bend" in it to ensure that the roots of the nikau were not harmed.
With the purchase of Archie Somerville's farm by Manukau City Council to become a reserve and the subsequent fencing of the bush (1999) the land was now available for public use. Unfortunately there was no easy entry. Jim rectified this through overseeing the building of the kissing gate next to the barn. This marked the beginning of interested parties working together to restore the Mangemangeroa Valley.

Replanting begun in the reserve in 2000. Jim's involvement was to source and propagate 350 plants including puriri, kahikatea, totara, mahoe, nikau (these died because they were in full sun in the swamp) and titree.

Since that first year Jim has continued to propagate seedlings; his latest venture (as part of Howick Rotary) has been the resiting of the shade house from Howick College to Somerville Intermediate and the consequent refurbishing and building of tool shed etc for use at Somerville Intermediate. Jim believes that "if I can enthuse students at an early age it may form a life long passion as my mother did for me"

Jim's interest in restoration continues with further trees being propagated each year. For the 2005 planting days Jim has propagated another 1500 native species, eco-sourced from the Reserve and adjacent properties.
This keen interest in the Mangemangeroa valley continues to play a large part in Jim's life.

The Friends of Mangemangeroa Society Inc
Autumn Newsletter March 2005

Hello and greetings from the Friends of Mangemangeroa committee. We hope that you all had a nice relaxing summer and managed to get out and enjoy the sights and sounds of the Mangemangeroa Reserve!

Reflections:

I continue to be encouraged by the interest of so many people in the welfare of the Mangemangeroa Reserve. This includes the Council staff, FOM members, the committee and the public at large.
An observation, made by a member during the past 2 weeks, of a ferret sighting between the Somerville Road fence-line (just north of the barn) and crossing to an adjacent house and back, serves as a warning on how essential it is that an "effective pest prevention and monitoring programme" continues to operate in all of the Mangemangeroa Reserve. While possum control forms the back-bone of pest prevention, we cannot overlook the need for Council to ensure that "pest prevention" for all significant pest species is implemented. Unfortunately 'Word is out" that the pest control programme has lapsed and not been reactivated dew to financial constraints.
This matter is being taken up with MCC Parks Department as a matter of urgency,

Annual General Meeting 2005:The Friends of Mangemangeroa Society Inc. Annual General Meeting will be held on **Wednesday 13th April** 7:30pm in the Fencible Lounge, Uxbridge Road, Howick. Anyone is welcome to attend. Bruce Keeley will be giving a presentation on "Birds of the Mangemangeroa Reserve"..

New Walkway: The Friends committee is delighted to report that a third stage of the Mangemangeroa walkway is to be constructed. Work on the southern extension is expected to be completed by the end of May.

Brochure: Members of the committee have been busy designing a new brochure for the Reserve. Thanks to Sally Barclay for co-ordinating these efforts.

Possums: Graham Falla has suspected possums of nibbling away at and damaging a precious Carmine rata vine growing in the Reserve. The Friends committee is investigating pest control options to combat this.

Hangi discovery: Alan La Roche has recently discovered an old Maori hangi pit near the Sandspit end of the Reserve. This midden site would have once been a pit on the terrace beside the estuary which has now eroded away. The midden contains broken hangi stones, charcoal and shell. It is an excellent example of a Maori hangi, or earth oven built probably several hundred years ago but still in good order.

Allan Riley Chainman

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Web address - www.aerolink.co.nz/mangemangeroa/main.html
Link to other conservation groups in the Auckland Region: www.manawa.org.nz
See also www.arc.govt.nz for upcoming events in the Auckland Region.