

THE FRIENDS OF MANGEMANGEROA SOCIETY INC
Autumn/Winter Newsletter 2007



Chairman's Ramblings

Mangemangeroa Valley Reserves Management Plan:

Around the time you receive this report, the decision of the MCC Hearing Committee will have been presented to the full meeting of Council. The submissions of your executive and members on their own behalf, were well received at the hearing.

A key submission was extending the Mangemangeroa Walkway up the valley under the bridge to exit at Haley Reserve in Haley's Lane. We are pleased to see that it is under active investigation by Council officers. The extending the 'green corridor' by connecting the valley with other nearby reserves, adds another link to the series of walkways around the City. This extension will provide an extra bush walk experience not previously envisaged.

Special thanks are due to Austen Gate for the time and effort he put in both to researching and then presenting to planners the strong case for a well developed and workable plan. Austen has at all stages of this drafting put forward the beliefs of the "Friends" and ensured that we were well represented.

Dog Exercising

The question of exercising dogs on the Reserves has been hotly debated. It seems that access to the bush in different areas in the Valley reserves may end with a compromise. The exercising of dogs on a leash in fenced paddock areas being a possibility. This would mean that, if ratified with a Bylaw change the bush areas and foreshores would be off limit to dogs.

Annual General Meeting

The AGM held in the later month of May this year saw most of the present committee re-elected. Allan Lovitt, our treasurer for a number of years resigned and Brian Hanlon was elected to this position. Brian is a long time Howick resident having lived here since 1962. For nineteen years he was Principal of Mellons Bay School. He has covered a fair bit of territory during his years in education, with substantial service in the Fiji Islands, the hill country of Poverty Bay and Papatoetoe. He came to Howick first as assistant principal at Howick Intermediate when it opened in 1965. He has already had quite a measure of involvement with Mangemangeroa through his association with the Rotary Club of Howick of which he is a Past President. He says that he is quite good at counting money!



Ngaire Tyson who was our representative from ARC and has proved a marvellous help with funding applications and ecological advice is now on maternity leave (she has a baby boy).

Our guest speaker, Anna Baine the Environmental Education Officer from the Council gave an enlightening talk on her role as an education officer of Manukau City Council. It is a new position and she is developing her role as she sees a need concerning environmental issues.

Last year the New Zealand Botanical Society undertook a detailed survey of the plants within the Mangemangeroa reserve. Attached to this newsletter is their report. If you wish to view the full list of species recorded visit the website www.aerolink.co.nz/mangemangeroa/main.html

Allan Riley, Chairman

Planting Days:

Restoration planting is now underway with students from **Howick College** planting 300 mahoe grown for us by Oratia Nurseries with funds from a special ARC grant. The students volunteered to do this on a Saturday and were a wonderful band of workers. A big thanks goes to their biology teacher, Mr Potter, for organizing these students.

The second planting was by **Our Lady Star of the Sea**. Karamu plants were grown under supervision of their caretaker. The students helped to plant these in an area near the water treatment station in Ramona Views. This planting was undertaken to reduce weed infestation occurring in this area and to extend the bush boundary. The karamu is a fast-growing pioneer species with particularly attractive red berries. These berries should entice the native birds from the bush to “pook” in this area thus dispersing the bush species within the newly planted area.

The younger students did a wonderful job getting nearly all of the 300 plants in the ground. These plants will need release weeding as the kikuyu had been cut to make it easy for the planters, but not treated to kill the roots. Much appreciated would be “release weeding” around these young plants for the next year or two by any Ramona Views residents who have a spare hour or two and are able to pull back the kikuyu.

A successful morning, organised by Graham Falla for **Forest & Bird**, saw the steep escarpment below the trig being planted with some 1300 manuka, kanuka, karamu, mahoe, totara and puriri. Helpers included 20 members of the Dawson Road Latter Day Saints Church.



The Friends planting day was supported by around 40 people including ‘Friends’, Rotarians, Guiders and Brownies (and their parents/leaders) and a few who saw the day advertised in the ‘Manukau Matters’ broadsheet. About 1100 plants (manuka, mahoe, karamu, cabbage trees and a few kanuka) were planted to complete the ‘Pioneer’ planting of large section in the southern Rotary Loop

Somerville Intermediate school planting was undertaken “between the showers” by a party of students who worked extremely well after a somewhat slippery walk to the site. A box of plants put down for a few moments to “give a rest” saw one of the friendly steers decide that “a change in diet” delivered “on a plate” was too good to miss and promptly “pruned” the plants to half their size.! This area was between the fence and the bush along the bottom flat.

Three more planting days are planned – Bucklands Beach Intermediate School, Youth Leadership Awardees (with 300 trees).and a final wrap-up day for the Friends and Rotary

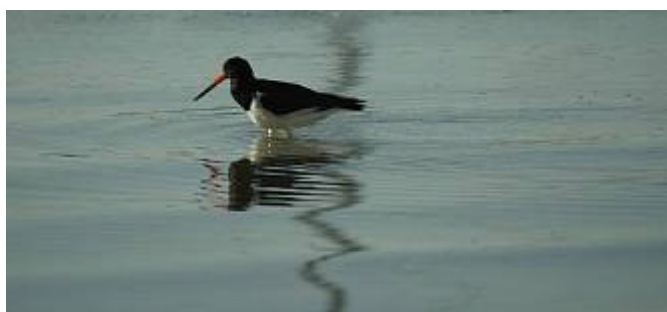
At the conclusion of this year’s plantings, around 4500 new trees will have been added to the reserve through volunteer plantings. All the seeds for these plantings have been eco-sourced from within the reserve, raised and pricked out by volunteers. In particular thanks go to Jim Duckworth, Graham Falla and his band of workers, and to the grounds people, Anita at Star of the Sea and Alan, at Somerville Intermediate who ensure that these plants are watered and fertilised regularly.

Tui Feeder

Mix white sugar, 3 dessertspoons to a full coffee cup of water. To this sugar add 1 to 2 teaspoons of vanilla complan. Stir well so the sugar and complan dissolve. Place solution in a bowl (From Connovation)

Mangemangeroa Estuary 2007

photos supplied by Doug Humby



Estuary Plants

The Taraire forest-mangrove-saltmarsh sequence seen in the Mangemangeroa Creek estuary is the only example in the Hunua Ecological District according to Ngaire Tyson.



Salt marsh plants

Salt marsh areas are found at the head of estuaries. The dominant plant seen here is the jointed rush or oioi (*Apodasmia similis*). Oioi was used by Maori for thatching the outsides of their houses.

Salt meadows

Beyond salt marsh, where the land becomes drier, tuft-forming plants are favoured. *Austrostipa stipoides* the needle tussock grows right to the edge of the tide. Among the tussock is found the pretty little white flowering harebell *Wahlenbergia littoricola* and the succulent ***Sarcocornia quinqueflora*** also known as the glasswort because the ashes from this plant were used in the glass making process.

Beyond the salt meadow, less influenced by the salt the flax becomes the dominant species.



Two Oystercatchers and a Stilt by *Bruce Keeley*

photos from Jason Elsworth www.jasonelsworth.co.nz

Three black and white wading birds which are likely to be seen in the lower estuarine part of the reserve can be the source of some confusion. But careful observation and a little practice will soon enable you to distinguish them with ease.

We'll start with the easiest one, the Pied Stilt, *Poaka*, or Black-winged Stilt as it is known in Australia. This most elegant of birds is named for its extraordinarily long pink legs which enable it to feed in quite deep water. The immaculate pattern of black above and white below can vary considerably from one bird to another, depending on age and, in some cases, the degree of hybridization with the very rare Black Stilt (*Kaki*). The sharp needle-like bill is black.

Attention is often first drawn to the presence of the Pied Stilt by its persistent high-pitched yapping call. Single birds or, more often, small groups may be seen at any time of the year feeding on invertebrates along the water's edge. Numbers in our region are swelled in autumn and winter by birds from the South Island who favour the northern harbours during the colder months.

Another annual migrant is the South Island Pied Oystercatcher (*Torea*) which breeds mostly on the braided river-beds of the South Island, but moves in tens of thousands to estuaries and harbours further north.

The SIPO (as birders call it) has a much stockier build than the Stilt, with shorter, pinkish legs, and a heavier, bright orange bill. The familiar call is a shrill 'pi-peet'.

The black head, breast, wings and back are in clear contrast with the white underparts, but take particular note of the little peninsula of white on the 'shoulder', in front of the folded wing. This is an important distinguishing mark between the SIPO and its rather confusing close relative, the Variable Oystercatcher.

As its name suggests the latter species evades conformity to a tidy description. The Variable – a strictly coastal bird – can be totally black, or smudgy, or almost identical in its pied pattern to the SIPO. But the pied birds lack the white 'peninsula', and the demarcation between white and black is less crisp.

Variables are much less numerous than Pieds. In fact they are a species at risk, on account of their habit of nesting on coastal sand dunes and shell banks. High tides, dogs, stoats, motor-bikes and holiday-makers are amongst the causes of a low breeding success in many places. Both oystercatcher species may be seen feeding or roosting together, giving an opportunity to note the Variable's slightly larger size and, to the very observant, it's deeper voice. The strong bill of both species can cope with a diet of hard-shelled molluscs and crabs as well as worms and other softer invertebrates.



Mangemangeroa Trip: Report- By Choo-Hang Khoo, Rm 17, Syndicate F

It was a dark and cloudy morning on the 17th May 2007. Despite the weather, Syndicate F still went to the Mangemangeroa Reserve for our study about mangroves and their environment. With all our gear ready to go, everybody was pumped up and very excited. Our great trip had begun ...

All of Syndicate F assembled in the hall and then slowly walked up the hill of Somerville Road. It had taken approximately half an hour to reach the entrance of the reserve. Once they arrived, they had morning tea. Everybody was split into groups and so they headed off in different directions. The first group went down to the swamp while the other group went on a walk around the reserve. Group A, the first group, arrived at the swamp after a 40-minute walk. Afterwards, they split again into two smaller groups. Each group had to do many different activities such as catching and observing mud crabs. Other activities were observing the mangroves and collecting mud samples. They spend around 40 to 60 minutes on this task.



Team B had set off in a completely different direction. They had to walk through the bushes and mini forests of the reserve while local historian Alan La Roche, informed them about what they were seeing and a little history about the place along the way. An amazing fact was that there is a place down the estuary that naturally has warm water. Every year, sharks would enter that area to breed and some sharks are as big as 2 metres in length!

After each group had finished their task, they gathered back to the starting point to have lunch. After lunch, each group switched tasks and activities. It was no longer than an hour later that it started to rain very heavily. Hence everyone got drenched. Unfortunately, due to the bad weather, Team B did not have the chance to go down to the estuary and swamp. Everyone started to speed up his or her movements, as the rain was very uncomfortable and cold.

Eventually, Syndicate F arrived back to school all exhausted and soaked. Since it was still early, Mrs Vandenburg (the Syndicate F lead teacher) decided to go out on the court to play a game of dodge ball as the weather cleared up. After the game, it was home time and everybody commented that it was a great but exhausting day.

Trudy's corner

"Manukau Parks is currently in the process of engaging an experienced track contractor to perform drainage clearance works at Mangemangeroa Reserve. These works will begin with the oldest section first, (below the carpark) and progress towards The Sandspit as funds allow. These works should commence in July.

In addition Manukau Parks have engaged Excell Corporation, (Councils primary parks maintenance contractor), to replenish boxed steps and walking surfaces. Again replenishment works will start on the oldest section of the track.

The nature of the Mangemangeroa site means much of the material for track maintenance must be helicoptered onto site. Establishment costs of this service mean spot maintenance is difficult and larger strategic sections must be completed as funds allow."

Monitoring of the pest control was pleasing with only one mouse and one possum baited over the monitored time. There is three year contract in place for the pest and weed control

Weed Infestations: The correct procedure for dealing with concerns such as weed infestations should be forwarded to the Call Centre.

Signage: When the new entry has been completed new signs may be available for the four points of entry. These signs could be similar to the new ones on the Rotary walk and include times, distances, exits/entrances, steepness, steps etc

Kowhai - Our National flower:

By Sally Barclay with botanical information supplied by Graham Falla



Kowhai in the Mangemangeroa Reserve is found along the coast line with juveniles throughout the forest. In the higher reaches of the reserve, where stock have been unable to feed young kowhai about 2 metres high show the twisted, zig zaggy form.

Down near the water's edge almost below the trig, a grove of kowhai exists where the lovely shape of individual trees can be seen.

In September the kowhai trees make a magnificent showing of yellow and provide food for a number of tui. The pigeon too, feed from the kowhai eating both the new shoot and the bud. A very old, large Kowhai is on the track edge and remains unnoticed until the Spring when it covers the surrounding ground with a mass of yellow flowers.

Recently botanists have separated the kowhai into eight species. Two of these occur naturally in the Reserve; *Sophora microphylla* and *S. chathamica*. *S. microphylla*, the more widespread has the leaflets reasonably well spaced while *S. chathamica* (mainly coastal on the Eastern side). has the leaflets overlapping. The photos show *S. chathamica* and the denseness of the foliage. Both are quite big trees with very similar flowers.

The bark had various medicinal uses for Maori, applied externally for itches and skin diseases, and taken internally as a tonic. The ashes were used to treat ringworm.



Weeds: We don't want



Moth plant which at the present time has the huge seed pods on it is a weed which is devastating to the bush. If you have or see any of the seed pods please dispose of them (put them in a plastic bag, tie it tight and place in the rubbish (Burn if you have a fire). The stem of the moth plant releases a white milky substance which is irritating to the skin of some people.



The second weed which has been in the news recently is *Rhamnus alaternus* (**Evergreen buckthorn**). This one is quite an attractive plant but on coastal cliffs competes with pohutakawa and replaces it. It is an evergreen shrub whose leaves may have serrated edges. The small flowers develop into bright red berries.

Contact details for the
Friends of the Mangemangeroa
Society Inc

Allan Riley – Chairperson
Ph: 534 4067 Allan.r@ihug.co.nz

Deborah Grant – Secretary
Ph 535 7072 debsgrant@ihug

web address:
[www.aerolink.co.nz/mangemangeroa/
main.html](http://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

Botany of Mangemangeroa Reserve, south-east Auckland

Ewen K Cameron & Leslie Haines

Mangemangeroa Reserve is a 22ha narrow mostly steep coastal forest along the north-west edge of Mangemangeroa Creek and parallel to Somerville Road just south of Howick, south-east Auckland (Fig. 1). The Waitemata sediments are deeply cut down by several small streams flow down the escarpment. Manukau City Council bought the land in 1994 and the pleasant walkway along it was established in 1999. A south Auckland Forest & Bird stalwart, Betty Harris, played a key role in persuading the Mayor and Council to purchase the former private farm. The land on the south-east side of the creek was less steep, and contains less native vegetation. Middens and a fortified site indicate Maori occupation previous to European farming. Farm stock was finally excluded from the forest area in 1999 and some possum control has occurred more recently.

Attendees of the Auckland Botanical Society fieldtrip to Mangemangeroa on 20 May 2006: Sally Barclay (Royal Society Teacher Fellow researching the reserve), Ewen Cameron, Holly Cox (past ecological researcher of the catchment), Gail Donaghy, Graham Falla (Friends of Mangemangeroa Reserve), Colleen Frampton, Leslie Haines, Graeme Jane, Sandra Jones, Joan Kember, Helen Lyons, Elaine Marshall, Carol & Garry McSweeney, Cara and Ros Nicholson (trip leader), Juliet Richmond, Josh Slater and Tony Williams.

In 2000 local Rotary clubs and Forest and Bird, working separately, became involved in bush restoration planting, and the Friends of Mangemangeroa was formed 1-2 years after that (incorporated in 2002) with the aim of fostering the wellbeing of Mangemangeroa with emphasis on protecting the natural features. The Friends come under the umbrella of Manukau Parks and work in consultation with them. In October 2006 a revised draft Management Plan for the reserve was released for public comment.

The author of a recent MSc thesis of the Mangemangeroa catchment, Holly Cox (2000), joined us for the trip. Holly's thesis was written on the terrestrial ecology, with an emphasis on the large and small scale vegetation patterns, in the Mangemangeroa Catchment. This was undertaken as part of a larger study of how the catchment and protected estuary would be affected by lifestyle block development due to district plan change. She examined: land use and vegetation history and the relationship between the two; current vegetation of the catchment; conservation mechanisms of habitat on private property. The fieldwork undertaken included: permanent plots 15 x 15m; sampling of all vegetation-cover abundance; basal area and density; litter depth, soil compactness; bird counts. The data collected was analysed using classification and ordination. Analysed data was then separated into vegetation types and mapped.

Sally Barclay (2003) also joined us for part of the day. She completed a NZ Science Mathematics and Technology Teacher Fellowship in 2003. She documented the location of the larger trees in the reserve using a GPS and digital photography.

Thomas Cheeseman made notes of his visit 'Howick to Maungamaungaroa [Mangemangeroa]' in June 1873 (Stanley 1998) and recorded 'scanty' vegetation of *Metrosideros robusta*, akepiro (*Olearia furfuracea*), *Coprosma lucida*, *C. robusta*, *Leucopogon fasciculatus*, and *Ozothamnus leptophyllus*. Two of these (akepiro, *Oz. leptophyllus*) are not currently recorded for the reserve. Cheeseman recorded at that time on the western side of the creek "...is distinguished with several patches of bush" and on the eastern bank opposite the most common trees were tawa (*Beilschmiedia tawa*), taraire (*B. tarairi*), puriri (*Vitex lucens*), toro (*Myrsine salicina*) (not currently listed for the reserve), mapou (*M. australis*), kohekohe (*Dysoxylum spectabile*) and with a few rimu (*Dacrydium cupressinum*), kahikatea (*Dacrycarpus dacyrdioides*) and kauri (*Agathis australis*).

Alan Esler and one of his sons, Wilson, in December 1984 surveyed the escarpment on the northwestern side of the Mangemangeroa Creek before the reserve was created (Esler & Esler 1985). They briefly described the habitat, vegetation, made several management considerations and provided a vascular plant list of 115 native species. They also interestingly pointed out: "This is the most species-rich forest bordering an estuary in the Waitemata or Manukau Harbours."

This reserve has some splendid remnants of mature coastal broadleaf forest. The area has been divided into seven vegetation communities: mature kohekohe, taraire forest, mahoe (*Melicytus ramiflorus*)/kawakawa (*Macropiper excelsum*)/mapou forest, regenerating totara (*Podocarpus totara*), taraire/kohekohe forest, mangroves (*Avicennia marina*), grassland (Fig. 2, Manukau City Council 2006). Although it is a narrow coastal strip of bush, the diversity is from saltmarsh (north end) species such as *Plagianthus divaricatus*, *Samolus repens*, *Selliera radicans* and oioi (*Apodasmia similis*), to cliff and gully species, with a small number of freshwater wetland (south end) species, including *Baumea rubiginosa* – others were difficult to distinguish at that time of the year. The mahoe/kawakawa/mapou forest is noticeably youngest and is located toward the narrow north-eastern end of the reserve and also adjacent to the grassed area along Somerville Road. The central bush patches of mature kohekohe forest and the taraire/kohekohe forest have some very large trees such as emergent *Metrosideros robusta*, and canopy species titoki (*Alectryon excelsus*), kohekohe, rewarewa (*Knightea excelsa*), taraire, tawa, puriri, karaka (*Corynocarpus laevigatus*), kowhai (*Sophora microphylla* s.l.) and pigeonwood (*Hedycarya arborea*). Towards the south-western end of the reserve is the taraire dominated forest with large kahikatea. *Clematis paniculata* is scattered through the forest. Undergrowth is healthy for the majority of the forest, e.g. mangeao (*Litsea calicaris*) seedlings, although the area of dense regenerating totara c.8m tall was sparse underneath.

How appropriate to visit an area named after a fern. The reserve and estuary name means 'valley of the mangemange' named after the climbing fern *Lygodium articulatum*, which is very local in the valley (Holly Cox pers. comm.). It may

have been more common before the area was heavily disturbed. It was used by Maori for: rope, thatching (lashing the thatch), fish hooks, eel traps, cutting greenstone and coils to sleep on – the term “bushman’s mattress” recalls how early Europeans also used it for rough bedding (Riley 1994).

Revegetation is occurring in the small patches within the fenced reserve. Over the last six years there has also been planting (evidently eco-sourced), of mostly *Coprosma robusta*, manuka (*Leptospermum scoparium*) and kawakawa, with some taraire, kahikatea, puriri and totara. Some of the planted kawakawa shrubs in the open suffered from a leaf curl – after showing photos and samples to various experts the cause was left unresolved.

Unfortunately there has been some vandalism to vines especially cutting off large rata vines, and it is thought to be possibly due to a misunderstanding of the value of these plants. However, along the protected bush edge adjacent to the grazed pasture is a number of fine specimens of rata: *Metrosideros diffusa*, *M. fulgens*, *M. perforata* and the most special was carmine rata (*M. carminea*) which was locally common. Most carmine rata were in the open climbing up old ponga trunks intermixed with *M. perforata*.

Comments on selected native species

Asplenium hookerianum – both forms (*A. hookerianum* var. *hookerianum* & var. *colensoi*) were present at one locality growing together on a shaded trackside bank under the tall coastal broadleaf forest (Fig. 3). Leon Perrie (pers. comm.) says that it is not unusual for the two forms to grow together, although it does appear to be unusual for northern New Zealand (pers. ob.).

Blechnum ?norfolkianum – as noted by Brownsey & Smith-Dodsworth (2000) *B. norfolkianum* is a poorly defined species which is difficult to tell apart from large mainland forms of *B. chambersii* and that the two may hybridise. In one forested area on a stream bank by the walkway there were several of these large ferns with sterile fronds to 50cm long x 12.5cm across, with shorter fertile fronds 27 x 6cm (AK 296885).

Streblus heterophyllus hybrid? – occasional wild shrubs (c.1m tall) in the sparse understorey of a dense stand of 8m-tall totara. The lower leaves fiddle-shaped but too large for this species (leaf blade to 7.0cm long x 3.5cm across (Fig. 4, AK 296884)? Perhaps they are hybrids with *S. banksii*?

Weeds

Esler & Esler (1985) commented that the area contained many alien plants which impair the value of forest reserves and then listed: hawthorn (*Crataegus monogyna*), brush wattle (*Paraserianthes lophantha*), blackberry (*Rubus fruticosus* agg.), tree privet (*Ligustrum lucidum*), Chinese privet (*L. sinense*), wild ginger (*Hedychium gardnerianum*), Himalaya honeysuckle (*Leycesteria formosa*), moth plant (*Araujia sericifera*), gorse (*Ulex europaeus*), pampas (*Cortaderia selloana*) and woolly nightshade (*Solanum mauritianum*). These are all still present today, plus many more (see Species List). However, the Friends have made weeds a high profile in the reserve with photos of target species like wandering Jew (*Tradescantia fluminensis*), woolly nightshade, wattle, moth plant) and collection bags and bins for regular walkers to contribute – this has been partially successful. At the eastern end of the walkway by the estuary several weed species seemed to be localised in this area by what was possibly an old house site marked by two old Morton Bay fig trees (*Ficus macrophylla*). The weeds here included: *Plectranthus ciliatus*, Port St John creeper (*Podranea ricasoliana*) scrambling up through other vegetation to 6m high, a couple of shrubs of *Fuchsia boliviana*; and on patches of an exotic moss, *Fissidens taxifolius*, were seedlings of Queensland poplar (*Homalanthus populifolius*) and loquat (*Eriobotrya japonica*). If not managed the small patch of *Carex divisa* observed on the estuary margin has the potential to spread and form extensive swards.

Birds

Birds recorded during our visit: blackbird, Eastern rosella, fantail, grey warbler, harrier, Indian myna, kingfisher, NZ pigeon, silvereye, tui, pukeko, welcome swallow, pied shag, white-faced heron, and Caspian tern.

Conclusions

It was a delight to visit such a treasure hidden away on the side of the estuary. The local residents and Manukau City are to be congratulated in keeping development off this steep land and restoring the bush areas. The walkway is a wonderful asset which gives everyone easy access through the best forested parts and wonderful vistas.

Acknowledgements

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References

- Barclay, S. 2003: The role of Environmental Monitoring in Resource Management. Unpublished Report
- Brownsey, P.J.; Smith-Dodsworth, J.C. 2000 (2nd ed.): New Zealand ferns and allied plants. David Bateman, Auckland.
- Cox, H. 2000: Vegetation and land use of the Mangemangeroa Catchment: the retention of natural values and environmental services. Unpublished MSc thesis, University of Auckland.
- Esler, A.E.; Esler, W.R. 1985: Maungamaungaroa Creek, Manukau City – Forest on west bank. Unpublished report to Manukau City.
- Manukau City Council 2006: Draft Restoration Plan for Mangemangeroa Reserve. Unpublished, Manukau City.
- Riley, M. 1994: Maori healing and herbal. Viking Sevenses N.Z. Ltd, Paraparaumu.
- Stanley, R. 1998: Excerpts from Cheeseman’s Field Notebooks. *Auckland Botanical Society Journal* 53(2): 70-71.
- Stevens, D. 1995: Vegetation Survey of the Mangemangeroa Reserve. Landcare Research report for Manukau City Council.