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## Field Trip Report: Marie Neverman Reserve, South Head, 15 May 2010

Kristy Hall

*Attendees: Ewen Cameron, Lisa Clapperton, Steve Cook, Bev Davidson, Geoff Davidson (leader), Oscar Grant, Simon Grant, Kristy Hall, Peter Hutton, Helen Lindsay, James Luty, Sandra Maclean, Christine Major, John Millett, Colleen Newton, Juliet Richmond, Josh Salter, Claire Stevens, Val Tomlinson, Mike Wilcox, Maureen Young.*

The motivation to visit Marie Neverman Reserve was provided by Geoff Davidson, one of our members and a trustee of the NZ Native Forests Restoration Trust (NZNFRT). In 2009 the Trust purchased 22.3 ha of land at Tupare, a lifestyle block subdivision located on the South Kaipara Peninsula near Shelly Beach. This was the first purchase by the Native Forest Restoration Trust in the Auckland region.

The original 22.3 ha property consists of 8 ha of pasture with 14 ha of lake and wetland. The purchase of the site, previously known as Leighton's Dam or Tupare Swamp was made possible by bequests and donations to the Trust. The reserve was named after the late Marie Neverman, who hoped that her bequest could be used to preserve bird habitat within the Auckland or Gisborne regions where she had lived and worked. The Trust was also looking to protect more areas of wetland, and as the property was identified by the Ornithological Society as significant habitat for wetland birds, this was a perfect fit. The total purchase price was \$1,050,000 involving more than \$300,000 from Marie Neverman.

Following the original purchase, the Trust focussed on the adjacent 113 ha of poorly drained pasture scarcely above sea level that had the potential to connect the Marie Newman Reserve to the Kaipara Harbour. In addition to rank pasture, the site included areas of mangroves and saltmarsh, coastal vegetation of regional and national significance (Haggitt et al., 2008). The Native Forests Restoration Trust decided

to purchase this neighbouring property and approached various organisations, including the Auckland Botanical Society, to support their cause. The property had already been protected by a Rodney District Council Conservation Covenant, which reduced the purchase price to a meagre \$200,000. The purchase of this property was completed in July 2010, expanding Marie Neverman Reserve to a total of 135 ha.



Fig. 1. Marie Neverman Reserve includes a 14 ha man-made lake (right), 113 ha of former saltmarsh (background) as well as 8 ha of pasture Photo : Robin Kerr, Harcourts Real Estate, 15 May 2010.

A keen group of 21 turned out for the Auckland Botanical Society field trip on Saturday 15 May 2010. The weather was uncooperative, but as we were botanising a wetland in May, rain was not unexpected. The trip began around the western shores of the lake, a man made structure which has been formed by damming and digging out the upper reaches of Parekawa Creek. The reserve is home to many waterfowl, including threatened species such as bittern, dabchick and fernbird. Nest boxes have been erected to support the breeding success of grey duck,

grey teal and scaup, and the more common mallard, paradise shelduck and shoveller.

The shores of the lake are fringed by dense stands of raupo (*Typha orientalis*), with large 'heads' of *Carex secta* poking attractively out of the water. Swamp millet (*Isachne globosa*) and native willow weed (*Persicaria decipiens*) occur around the fringes. A patch of *Baumea teretifolia* was present, accompanied by tangle fern (*Gleichenia microphylla*), both species associated with low fertility soils including peat bogs and gumland. Other fern species present around the lake included patches of kiokio (*Blechnum novae-zelandiae*), bracken (*Pteridium esculentum*), mamaku (*Cyathea medullaris*), scented fern (*Paesia scaberula*), wheki (*Dicksonia squarrosa*) and rasp fern (*Doodia australis*). One individual of *Pomaderris amoena* was spotted, another gumland species.

The slopes around the edge of the lake have been fenced off from grazing, but only within the last few years. There are mature and senescing kanuka (*Kunzea ericoides*) and occasional manuka (*Leptospermum scoparium*), with a sparse understorey, reflecting historic grazing and invasion by kikuyu (*Pennisetum clandestinum*). Some natural regeneration of kanuka is occurring, and the NZNFRT is planning several planting days to supplement natural regeneration.



Fig. 2. Maureen Young describing the features of *Gleichenia microphylla*. Note - bird hides in the lake in the background. Photo: Bev Davidson, 15 May 2010.

At the tip of the peninsula at the south-western end of the reserve, the heavens opened, and we took refuge beneath the canopy. On the steeper banks inaccessible to stock, there was a greater diversity of vegetation with kanuka as well as akepiro (*Olearia furfuracea*), mapou (*Myrsine australis*) prickly mingimingi (*Leptecophylla juniperina*) and one *Dracophyllum sinclairii*. Even three mature specimens of 'Regionally at Risk' (Stanley et al. 2005) narrow leaved maire (*Nestegis montana*) were found. Sedges and groundcovers comprised coastal astelia (*Astelia*

*banksii*), turutu (*Dianella nigra*), sword sedge (*Lepidosperma laterale*), pohuehue (*Muehlenbeckia complexa*), and slender rice grass (*Microlaena stipoides*).



Fig. 3. *Ileostylus micranthus* growing on *Kunzea ericoides* in Marie Neverman Reserve. Photo: Bev Davidson, 15 May 2010.

In the pouring rain we backtracked beside the lake to descend down onto the newer section of reserve over the dam. Here, Geoff showed us a beautiful specimen of green mistletoe (*Ileostylus micranthus*) ( Fig. 3), a 'Regionally Critical' species, growing on kanuka. We harvested some ripe berries to establish on kanuka and *Coprosma propinqua* trees in other parts of the reserve. The group then set off across the low-lying "pasture", which although historically drained, is rapidly being reclaimed by tidal influence. The area is dominated by kikuyu and pampas (*Cortaderia selleana*), with large numbers of exotic sharp rush (*Juncus acutus*) (Fig. 4). It is likely to have once been native saltmarsh, but there are now only very small patches of oiio (*Apodasmia similis*), *Baumea juncea* and *Ficinia nodosa*. Native *Juncus kraussii*, *J. pallidus* and *J. edgariae* occur, and there are extensive patches of *Isolepis prolifer*. In some places, groups of young kanuka trees have died apparently due to the increasing salinity following the cessation of drainage.

Within the pasture-marshland are raised islands, historic shellbanks, which have become colonised by terrestrial vegetation. They support a unique vegetation type of ngaio-kowhai forest (*Myoporum*



*laetum* - *Sophora chathamica*). Ngaio is a 'Regionally Chronically Threatened' species rarely found growing naturally in Auckland. Interestingly, the islands include both old gnarled trees and an abundance of seedlings. The island we visited also supported another 'Regionally Threatened' species *Coprosma propinqua*, along with flax (*Phormium tenax*), giant umbrella sedge (*Cyperus ustulatus*), and a large patch of native jasmine (*Parsonsia heterophylla*).

The group did not manage to explore the majority of the site and will have to return to view the *Olearia solandri* and *Plagianthus divaricatus* saltscrub present on the man-made bund encircling the marsh. We also did not find the single 'Regionally At Risk' *Olearia albida* known to be present. No doubt there are also some interesting plants to be found on the shellbanks bordering the Kaipara Harbour further to the east.

The long term goal for the Marie Neverman Reserve is to establish an open sanctuary. By the end of 2010, the Trust plans to covenant the entire 135 ha reserve with the QEII National Trust. Pest and weed control is already underway and in autumn 2010 several community planting days were held. The project is supported by the Ornithological Society of New Zealand, South Kaipara Landcare Trust, Kaipara



Fig. 4. The open marshland with exotic *Juncus acutus* in the foreground and ngaio forest island on the left. Photo: Bev Davidson, 15 May 2010.

Branch of Forest and Bird, and the Auckland Regional Council as well as many others. The site of the reserve less than one hour from central Auckland makes it a prime location. A checklist of the indigenous vascular plants of the reserve is attached (Appendix 1).

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#### Acknowledgements

Thank you to Maureen Young, Ewen Cameron and Geoff Davidson for updating the species list, and to Geoff Davidson and Mike Wilcox for reviewing the article.

Appendix 1. Checklist of Indigenous Vascular Plants of Marie Neverman Reserve, Tupare, and adjoining swamp & saltmarsh South Kaipara Head, Map Ref NZMS 260 Q10/310115; compiled by Sandra Jones, Alison Wesley, Maureen Young and Ewen Cameron 29 May, 14 June 2009, 15 May 2010.

#### Ferns & Fern Allies

*Adiantum cunninghamii*, maidenhair fern  
*Asplenium flaccidum*, hanging spleenwort  
*Asplenium oblongifolium*  
*Asplenium polyodon*, sickle fern  
*Blechnum filiforme*, thread fern  
*Blechnum novae-zelandiae*, kiokio  
*Cyathea dealbata*, ponga, silver tree fern  
*Cyathea medullaris*, mamaku, black tree fern  
*Deparia petersenii*  
*Dicksonia squarrosa*, wheki  
*Doodia australis*, rasp fern  
*Gleichenia dicarpa*, umbrella fern  
*Gleichenia microphylla*, tangle fern  
*Lastreopsis microsora*  
*Microsorium pustulatum*, hound's tongue fern  
*Paesia scaberula*, ring fern, yellow fern  
*Pneumatopteris pennigera*, gully fern  
*Pteridium esculentum*, bracken  
*Pteris tremula*  
*Pyrrhosia eleagnifolia*, leather fern

#### Gymnosperms

*Dacrycarpus dacrydioides*, kahikatea (planted)

#### Dicotyledons

*Acaena novae-zelandiae*, bidibid  
*Alternanthera nahui*  
*Apium* "white denticles", native celery  
*Avicennia marina*, mangrove  
*Calystegia sepium*, convolvulus  
*Centella uniflora*  
*Coprosma lucida*, glossy karamu  
*Coprosma propinqua*  
*Coprosma propinqua* x *C. robusta*  
*Coprosma rhamnoides*  
*Coprosma robusta*, karamu  
*Cotula coronopifolia*, bachelor's buttons  
*Dichondra repens*, Mercury Bay weed  
*Dracophyllum sinclairii*, grass tree  
*Epilobium rotundifolium*, a willow herb  
*Geniostoma ligustrifolium*, hangehange  
*Geranium homeanum*

*Gonocarpus incanus*  
*Hydrocotyle novae-zelandiae*  
*Hypericum pusillum* (*H. japonicum*)  
*Ileostylus micranthus*, mistletoe  
*Knightia excelsa*, rewarewa  
*Kunzea ericoides*, kanuka  
*Leptocophylla juniperina*, prickly mingimingi  
*Leptospermum scoparium*, manuka  
*Leucopogon fasciculatus*, mingimingi  
*Lobelia anceps*  
*Macropiper excelsa*, kawakawa  
*Melicytus ramiflorus*, mahoe  
*Muehlenbeckia complexa*, wire vine  
*Myoporum laetum*, ngaio  
*Myrsine australis*, mapou  
*Nertera depressa*  
*Nestegis montana*, mountain maire, narrow-leaved maire  
*Olearia albida*, tree daisy  
*Olearia furfuracea*, akepiro, tree daisy  
*Olearia solandri*, saltmarsh tree daisy  
*Parsonsia heterophylla*, native jasmine  
*Persicaria decipiens*, willow weed  
*Plagianthus divaricatus*, saltmarsh ribbonwood  
*Pomaderris amoena*, tauhinu  
*Pomaderris kumeraho*, kumarahou  
*Pseudognaphalium luteoalbum*, cudweed  
*Pseudopanax lessonii*, houpara, coastal five finger  
*Ranunculus reflexus*, hairy buttercup  
*Rubus cissoides*, bush lawyer  
*Samolus repens*  
*Sarcocornia quinqueflora*, glasswort  
*Selliera radicans*, remuremu  
*Solanum nodiflorum*, nightshade  
*Sophora chathamica*, kowhai  
*Spergularia* sp., sea spurrey  
*Suaeda novae-zelandiae*, sea blite  
*Veronica plebeia*

#### Monocotyledons

*Apodasmia similis*, oiioi, jointed wire rush  
*Astelia banksii*, shore kowharawhara  
*Austrostipa stipoides*, needlegrass

*Baumea articulata*, jointed twig-rush  
*Baumea juncea*  
*Baumea rubiginosa*  
*Baumea tenax*  
*Baumea teretifolia*  
*Bolboschoenus fluviatilis*, marsh clubrush  
*Carex flagellifera*, trip-me-up  
*Carex ochrosaccus*  
*Carex secta*, pukio  
*Carex solandri*  
*Carex virgata*  
*Cordyline australis*, cabbage tree  
*Cordyline pumilio*, dwarf cabbage tree  
*Cyperus ustulatus*  
*Dianella nigra*, blueberry  
*Eleocharis acuta*, sharp spike sedge  
*Eleocharis sphacelata*, giant spike sedge  
*Ficinia nodosa*, knobby club rush  
*Gahnia lacera*, cutty grass  
*Isachne globosa*, swamp millet  
*Isolepis cernua*  
*Isolepis prolifera*  
*Isolepis reticularis*  
*Juncus edgariae*  
*Juncus kraussii*, sea rush  
*Juncus pallidus*  
*Juncus planifolius*, leafy rush  
*Juncus sarophorus*  
*Lachnagrostis filiformis*, wind grass  
*Lemna minor*, duckweed  
*Lepidosperma australe*, square sedge  
*Lepidosperma laterale*, sword sedge  
*Microlaena stipoides*, meadow rice grass  
*Oplismenus hirtellus*, bush panic grass  
*Phormium tenax*, harakeke, flax  
*Schoenoplectus tabernaemontani*, lake clubrush  
*Schoenus maschalinus*  
*Triglochin striata*, arrow grass  
*Typha orientalis*, raupo  
*Wolffia australiana*, watermeal

## Trip Report: Mt Pleasant Bush, Pine Valley Road, Silverdale, 19 June 2010

Lisa Clapperton

Those attending were: *Lisa Clapperton* (leader), *Brian Cumber*, *Neil Davies*, *Hamish Dublon*, *Michelle Dublon*, *Anne Grace*, *Sharon Graham*, *Joe Gregg*, *Richard Hursthouse*, *Peter Hutton*, *Sandra Jones*, *James Luty*, *Christine Major*, *John Millett*, *Juliet Richmond*, *Josh Salter*, *Gorakh Silvester*, *Harold Waite*, *Mike Wilcox*, *Dave Wilson*, *Philip Wrigley*, *Maureen Young*.

The Mt Pleasant property is owned by Bob and Molly Crawford and has been the family farm for a number of generations, as a dairy farm and more latterly raising dairy calves and heifers. The fascinating homestead is 103 years old, with the bush having been milled about 1890.

The area of bush covers about 25 ha on the south facing slope visible to the north of Pine Valley Road, Silverdale. Weiti Stream runs along the toe of the slope forming a natural boundary between the pasture and the bush as it makes its way east to the Wade (Weiti) River running from Silverdale out to the sea at the southern base of the Whangaparaoa Peninsula. From a distance stands of kauri (*Agathis australis*) rickers emerge from the general canopy containing a wide range of climax species (Fig. 1).

We followed a spur up to the main skyline ridge which runs west to east separating Pine Valley Road from the Wainui Valley. We were all kept busy observing and recording the plants and were impressed by the good quality and tree variety of the forest so progress was slow right from the start. Kauri, tanekaha