

BROOKFIELDS RESERVE, ALBANY

Chris McKain

This south-facing bush reserve of approximately 17.5 ha runs along the north side of the Oteha Stream, and to the south of the Massey University. My first interest in this bush was when I was a noxious weed contractor to the North Shore City Council. While working along the Brookfields Stream I noticed a large number of titoki (*Alectryon excelsus*) seedlings in amongst the woolly nightshade (*Solanum mauritianum*) and Chinese privet (*Ligustrum sinense*) etc., and a few very large titoki growing along the Oteha Stream. My interest was kindled to find out what else was there.

Access can be made from the Brookfields housing estate at any point and at either end, i.e. the Albany Highway bridge or at the Bush Road bridge. A track runs most of the length of the reserve or you can follow the stream.

Because this area used to be a farm, many exotic plants have become naturalised in the area close to the ends and the flat land south of the stream around the houses. Large totara (*Podocarpus totara*) and a few kahikatea (*Dacrydium dacrydioides*) still remain in the streams feeding into the Oteha Stream. This area has become storm water reserve land between the housing estates. Fortunately the bush itself is rather undisturbed.

From near the bend which takes the stream eastward towards Bush Road there is a concrete ford and this part of the track is well used. All around, the impact of humans is evident, chinese privet, tree privet (*Ligustrum lucidum*), blackberry (*Rubus fruticosus*), gorse (*Ulex europaeus*), woolly nightshade, black wattle (*Acacia mearnsii*), green wattle (*A. decurrens*), monkey apple (*Acmena smithii*), Scotch thistle (*Cirsium vulgare*), wandering Jew (*Tradescantia fluminensis*), montbretia (*Crocasmia x crocosmiiflora*), *Rumex* sp, *Polygonum* sp, etc. Growing near by is the first of many native jasmine vines (*Parsonia heterophylla*). The first time I was there in August, this was fruiting profusely, and trying to get its own back by semi-smothering the woolly nightshade and wattles. Also the green wattle was in flower and its yellow stood out well against the native green foliage.

The track quickly becomes dominated by natives: mahoe (*Melicactus ramiflorus*), hangehange (*Geniostoma rupestre*), karamu (*Coprosma robusta*), totara, tanekaha (*Phyllocladus trichomanoides*), kiokio (*Blechnum novae-zelandiae*), ponga (*Cyathea dealbata*), mamaku (*Cyathea medullaris*), mapou (*Myrsine australis*), kanuka (*Kunzea ericoides*) etc. *Blechnum chambersii* grows near the storm water line along the stream along with a fair bit of montbretia. This is a delightful area of shrubby plants and ferns, under large totara.

Further on the canopy is much higher and complete. Here is the first large titoki growing up from the stream bank. Tawa (*Beilschmiedia tawa*) is also present along with large kowhai (*Sophora microphylla*), porokaiwhiri (*Hedycarya arborea*), pate (*Schefflera digitata*), horoeka (*Pseudopanax crassifolius*), ti kouka (*Cordyline australis*), rimu (*Dacrydium cupressinum*), and many sedges. Then you come across matai (*Prumnopitys taxifolia*) and a great number of totara in an elevated flat section. Some of these totara are over 20 m high and approximately 1 m in diameter. Why they were not felled when the area was cleared, I do not know. Down nearer the stream are very large kahikatea. One is 3.6 m in diameter. The higher ground and that nearer the stream differ dramatically. The under growth is much thicker closer the water where most of the species of ferns and *Coprosma* are. Also amongst supplejack (*Ripogonum scandens*) is *Streblus heterophyllus*, and *Melicactus micranthus*. Above the totara near the scrub line is a continuous band of *Alseuosmia macrophylla* of many leaf forms. One looks like *A. macrophylla* x *A. quercifolia*; also no signs of orchids.

One unwelcome sight is a large patch of wandering Jew getting a hold on this side of the stream. It is still localised enough to treat. I suspect it came as a contaminant when *Cannabis* was cultivated here. The scrub line is mostly kanuka, with *Hakea serifolia*, gorse, *Pinus radiata*, wattles, with bracken (*Pteridium esculentum*) also present. Surprising is the lack of *Cortaderia jubata*, with only a few plants getting established. No manuka (*Leptospermum scoparium*) was seen. In a clear spot I found a near monoculture of *Carex lesssoniana*. This area must get quite wet in winter.

Farther along the matai disappears into tanekaha and rewarewa (*Knightia excelsum*). Nikau (*Rhopalostylis*

Farther along the matai disappears into tanekaha and rewarewa (*Knightsia excelsum*). Nikau (*Rhopalostylis sapida*) becomes more common and the first sightings of karaka (*Corynocarpus laevigatus*), puriri (*Vitex lucens*) and kohekohe (*Dysoxylum spectabile*). Kauri (*Agathis australis*) is now also present. Then you enter an open space under a large puriri. A few heketara (*Olearia rani*) are over hanging the slope and above you are good sized kauri. Above this, near the bush line, evidence of recent grazing could be seen. Weeds were in abundance.

A few metres on is a large grassy area which was swampy even in our January drought conditions. This was almost entirely buttercup (*Ranunculus repens*), mint (*Mentha* sp.), and *Calystegia* sp. From here on to Bush Road the number of exotics increases dramatically. Ginger (*Hedychium* sp.), willows (*Salix* sp.), maderia vine (*Anredrea cordifolia*), Japanese honeysuckle (*Lonicera japonica*), privet, even figs (*Ficus carica*). One delightful find was three kotukutuku (*Fuchsia excorticata*) growing along side Bush Road, next to the bridge.

While this piece of bush is nearly weed free in its centre under the canopy, (a rarity on the North Shore), there is still a number of weed species present which cause concern. Amongst the bush I found the odd site of: ginger, *Elaeagnus x reflexa*, wandering Jew, spindle tree (*Euonymus japonica*), African club moss (*Selaginella kraussiana*), tree privet and climbing asparagus (*Asparagus scandens*). Except for the wandering Jew and club moss these are still in very small numbers and control work is needed to protect this piece of bush.

NATIVE FERNS AND ALLIES

Asplenium bulbiferum
Asplenium flaccidum
Asplenium oblongifolium
Asplenium polyodon
Blechnum chambersii
Blechnum filiforme
Blechnum fraseri
Blechnum novae-zelandiae

Cyathea dealbata
Cyathea medullaris
Dicksonia squarrosa
Doodia media
Gleichenia sp.
Lastreopsis glabella
Lastreopsis hispida
Lycopodium deuterodensum

Paesia scaberula
Phymatosorus scandens
Polystichum richardii
Pteridium esculentum
Pteris macilentia
Pyrosia eleagnifolia
Thelypteris pennigera

NATIVE CONIFERS

Agathis australis
Dacrycarpus dacrydioides
Dacrydium cupressinum

Podocarpus totara
Prumnopitys ferruginea

Prumnopitys taxifolia
Phyllocladus trichomanoides

NATIVE DICOTYLEDONS

Alectryon excelsus
Alseuosmia macrophylla
 x *A. quercifolia*?
Alseuosmia macrophylla
Beilschmiedia tawa
Brachyglottis repanda
Carpodetus serratus
Clematis cunninghamii
Clematis paniculata
Coprosma areolata
Coprosma grandifolia
Coprosma rhamnoides
Coprosma robusta
Coprosma spathulata

Corynocarpus laevigatus
Dysoxylum spectabile
Fuchsia excorticata
Geniostoma rupestre
Haloragis erecta
Hebe stricta
Hedycarya arborea
Knightsia excelsa
Kunzea ericioides
Macropiper excelsum
Melicytus micranthus
Melicytus ramiflorus
Metrosideros fulgens
Metrosideros perforata

Myrsine australis
Nertera depressa
Nestegis lanceolata
Olearia furfuracea
Olearia rani
Parsonsia heterophylla
Pseudopanax crassifolius
Rhabdothamnus solandri
Rubus cissoides
Schefflera digitata
Solanum americanum
Sophora microphylla
Streblus heterophyllus
Vitex lucens

Possibly *Coprosma lucida* is present as well, as it was only a few days ago that I learned to positively identify it from *C. robusta*.

NATIVE MONOCOTYLEDONS

Carex dissita
Carex lesssoniana

Collospermum hastatum
Cordyline australis

Cyperus ustulatus
Dianella nigra

Freycinetia banksii
Gahnia lacera
Gahnia setifolia
Hydrocotyle sp.

Microlaena avenacea
Microlaena stipoides
Oplismenus imbecillis
Phormium tenax

Rhopalostylis sapida
Ripogonum scandens
Uncinia uncinata

INTRODUCED SPECIES

FERN ALLIES

Selaginella kraussiana

CONIFERS

Pinus radiata

DICOTYLEDONS

Acacia decurrens
Acacia longifolia
Acacia mearnsii
Acmena smithii
Anredera cordifolia
Calystegia sp.
Cirsium vulgare
Crataegus monogyna
Elaeagnus x reflexa
Euonymus japonica

Ficus carica
Hakea serifolia
Hydrangea macrophylla
Ligustrum lucidum
Ligustrum sinense
Lonicera japonica
Lotus sp.
Mentha sp.
Oxalis incarnata

Polygonum sp.
Ranunculus sp.
Rubus fruticosus
Salix babylonica
Senecio jacobaea
Solanum mauritianum
Solanum nigrum
Solanum pseudocapsicum
Ulex europaeus

MONOCOTYLEDONS

Asparagus scandens
Cortaderia jubata
Crocasmia x crocosmiiflora

Cyperus eragrostus
Hedychium gardnerianum
Hedychium flavescens

Junus effusus
Tradescantia fluminensis
Zantedeschia aethiopica

There were more exotics than listed on the bush edge. The many grasses etc. growing as wasteland colonisers were not considered.

Acknowledgement: Ewen Cameron assisted with the proof reading of this issue.