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Olive Davis Forest & Bird Reserve, Ranfurly Road, Alfriston 21 April 2012

Dave Wilson, Graham Falla and Mike Wilcox

Participants: *Enid & Paul Asquith, Colleen & Warren Brewer, Jan Butcher, Graham Falla (leader), Joe Grieg, Rosa Henderson, Peter Hutton, Margi Keys, Suman Pancha, Juliet Richmond, Val Tomlinson, Alison Wesley, Mike Wilcox, Tony Williams, Dave Wilson.*

This 8 ha reserve is owned by the Royal Forest and Bird Protection Society of NZ and cared for by the South Auckland branch. The property was formerly owned by Ged and Olive Davis, and was bequeathed to Forest and Bird after Olive died in 1979. The forest had been milled for kauri (*Agathis australis*), rimu (*Dacrydium cupressinum*) and totara (*Podocarpus totara*) in the past, and partially cleared, but it remains a valuable piece of bush. Natural regeneration has been enhanced by planting and pest control undertaken by Forest and Bird members.

Our entry point to the reserve was along what was formerly a horse and trap driveway. Just inside the gate, we were able to add the native grass, *Microlaena stipoides*, to the species list for the reserve (see Appendix). Only a short distance further on, the driveway was well on the way to being reclaimed by forest, aided by plantings done by Forest and Bird in the early 1980s. These consisted of trees grown from seed collected from within the reserve. It was interesting at this point to see the size

attained by a native passionfruit (*Passiflora tetrandra*) which had reached the canopy in the 30 or so years since the puriri (*Vitex lucens*) up which it had climbed had been planted. The abundance of *Passiflora* in the reserve was evident not only from the number of plants we saw during the day, but also in the quantity of fallen fruit on the forest floor in places. Other species planted in the same area included pukatea (*Laurelia novae-zelandiae*) and kauri. The latter had been grown from seed obtained from the only fertile tree to have survived milling in the reserve.

Soon we were walking under a canopy characterised in the reserve management plan as being of taraire (*Beilschmiedia tarairi*) and puriri, with the gully sides and gully floor having rimu, tawa (*Beilschmiedia tawa*), rewarewa (*Knightia excelsa*), kahikatea (*Dacrycarpus dacrydioides*), pukatea, ponga (*Cyathea dealbata*), mamaku (*Cyathea medullaris*) and wheki (*Dicksonia squarrosa*).

Where we rejoined the driveway, it was still something of an open thoroughfare. In this habitat we were able to begin in earnest to compile a list of naturalised exotic species for the reserve, and also recorded bidibidi (*Acaena novae-zelandiae*) and the fern *Deparia petersenii* for addition to the natives list. The driveway led to a notable feature of the reserve, the Olive Davis Cottage. Recently restored, the



Fig. 1. Pukatea tree, Olive Davis Reserve. Photo: Mike Wilcox, 21 April 2012.

cottage was originally built for Ged and Olive Davis by the architect James Walter Chapman Taylor between 1928 and 1930. Members enjoyed the opportunity to view the cottage from inside and out.

The damp, shaded bare ground surrounding the cottage had a plant community of its own. Native species were represented by *Isolepis reticularis*, *Juncus planifolius*, *Lobelia anceps*, *Persicaria decipiens* and *Pseudognaphalium luteoalbum* – all additions to the species list. Exotics included *Conyza sumatrensis*, *Cyperus eragrostis*, *Gamochaeta simplicicaulis*, *Juncus tenuis*, *Lotus pedunculatus*, *Plantago major*, *Rumex obtusifolius*, *Sagina procumbens*, *Senecio bipinnatisectus*, *Solanum nigrum*, *Sonchus asper* and *Stachys sylvatica*. African club moss (*Selaginella kraussiana*) was also present in this area and is probably one of the weeds of most concern in the reserve.

After leaving the cottage we descended into the main gully, where many of the ferns seen during the trip were recorded. This included an individual of soft tree fern (*Cyathea smithii*), a species which is more abundant in colder, and wetter, climates than that of Auckland. We found *Asplenium gracillimum* here, with which we replaced *A. appendiculatum* on the species list, suspecting that the former may have been mistakenly recorded as the latter in the past. Some of us scrambled up the stream in the search for more fern species. We stopped for lunch in this gully, near a tree fern trunk which provided us with two species



Fig. 2. *Asplenium lamprophyllum*, Olive Davis Reserve. Photo: Mike Wilcox, 21 April 2012.

of filmy ferns, these being noticeably sparse in the reserve. These were *Trichomanes venosum* and, another of the day's additions to the species list, *Hymenophyllum demissum*.

Continuing down the gully, we found a specimen of turepo (*Streblus heterophyllus*) and were invited by Graham to view the many large cave weta inhabiting an old pump shed. A prominent rimu here had a big cavity in the base of its trunk. We viewed a large pukatea in the gully (Fig. 1) and the single matai (*Prumnopitys taxifolia*) known in the reserve, which, being a male tree, has not made a contribution of seed for revegetation. By this time we were, as previously, under a canopy of taraire and puriri, still with kahikatea, rimu, tawa and rewarewa, and now also with tanekaha (*Phyllocladus trichomanoides*) and kohekohe (*Dysoxylum spectabile*). The fern *Asplenium lamprophyllum* was particularly common (Fig. 2). We also saw the totara forest with tanekaha, rimu and kahikatea described in the reserve management plan. The sparse understorey here was partly attributed by Graham to the effects of the totara trees themselves on soil fertility. We inspected some *Clematis* seedlings (trifoliolate, glabrous, leaflets deeply lobed), which it appeared had been previously identified as *Clematis cunninghamii* but which we considered to be just *C. paniculata*. Some small shrubs of swamp mahoe (*Melicytus micranthus*) had flowers.

The next new vegetation type we encountered was towards the northern end of the reserve, and was an interesting stage in forest regeneration. Graham recounted to us a 30 year period of succession, following clearance to bare paddocks, progressing to gorse, bracken and manuka and later to tree ferns, mapou (*Myrsine australis*) and mahoe (*Melicytus ramiflorus*). We were impressed by the size of many of the hangehange (*Geniostoma ligustrifolium*) we encountered in this area, which may have exceeded 6 m in height (Fig. 3). The forest floor had excavations by rabbits, an animal pest that may be a hindrance to forest regeneration here, and was an unexpected

animal in a forest habitat for some of us. There were numerous seedlings and juveniles of *Parsonsia heterophylla*, and another climber, *Muehlenbeckia australis*, was seen near the forest edge.

Throughout the day, Graham's intimate knowledge of the reserve had enabled him to show us particular trees and other items of interest. The final instances of this came when we were taken to the single northern rata (*Metrosideros robusta*) known to be in the reserve, and a specimen of five-finger (*Pseudopanax arboreus*) which was an addition to the reserve species list.

Certain potential 'problem' weeds were present in small numbers, and members took the opportunity to pull out juveniles of Chinese privet (*Ligustrum sinense*), tobacco weed (*Solanum mauritianum*) and monkey apple (*Syzygium smithii*). The presence of *Selaginella kraussiana* has already been noted. Overall, however, the reserve was seen to be in a healthy state of regeneration, an asset to Manurewa



Fig. 3. Mahoe-mapou-hangehange forest, Olive Davis Reserve, 21 April 2012, Mike Wilcox.

and a credit to the care being taken of it by members of the South Auckland branch of Forest and Bird. Our thanks to South Auckland Forest and Bird for the opportunity to visit the reserve.

Appendix: Native Vascular Plant Species List for Olive Davis Reserve.

All listed species were seen during the Bot Soc field trip on 21 Apr 2012. List is based on records by Mark Bellingham and David Slaven (1986); additions by Andrew Dakin; updates by Nicholas Martin (2000); Petra White (2001 and 2002); Mike Wilcox, Graham Falla, and Petra White (2002); Graham Falla, John Rugis and Mike Wilcox (2010); Auckland Botanical Society (2012).

Ferns

Asplenium bulbiferum
A. flaccidum
A. gracillimum
A. lamprophyllum
A. oblongifolium
A. polyodon
Blechnum chambersii
B. discolor
B. filiforme
B. fraseri
B. membranaceum
B. novae-zelandiae
Cyathea dealbata
C. medullaris
C. smithii
Deparia petersenii
Dicksonia squarrosa
Doodia australis
Hymenophyllum demissum
Lastreopsis hispida
Leptopteris hymenophylloides
Loxogramme dictyopteris
Lygodium articulatum
Microsorium pustulatum
M. scandens

Pneumatopteris pennigera
Pteridium esculentum
Pteris macilentata
P. tremula
Ptisana salicina
Pyrrhosia eleagnifolia
Rumohra adiantiformis
Tmesipteris elongata
T. lanceolata
T. tannensis
Trichomanes elongatum
T. venosum

Conifers

Agathis australis
Dacrycarpus dacrydioides
Dacrydium cupressinum
Phyllocladus trichomanoides
Podocarpus totara
Prumnopitys ferruginea
P. taxifolia

Dicots

Acaena novae-zelandiae
Alectryon excelsus
Alseuosmia macrophylla

Beilschmiedia tarairi
B. tawa
Brachyglottis repanda
Carpodetus serratus
Centella uniflora
C. paniculata
Coprosma arborea
C. areolata
C. grandifolia
C. rhamnoides
C. robusta
C. spathulata
Corynocarpus laevigatus
Dysoxylum spectabile
Geniostoma ligustrifolium
Griselinia lucida
Haloragis erecta
Hedycarya arborea
Hoheria populnea
Knightia excelsa
Kunzea ericoides
Laurelia novae-zelandiae
Leptospermum scoparium
Leucopogon fasciculatus
Lobelia anceps
Macropiper excelsum
Melicytus micranthus
M. ramiflorus
Metrosideros diffusa
M. fulgens
M. perforata
M. robusta
Muehlenbeckia australis
Myrsine australis
Nertera dichondrifolia
Nestegis lanceolata
Olearia rani

Parsonsia heterophylla
Passiflora tetrandra
Persicaria decipiens
Pittosporum tenuifolium
Pseudognaphalium luteoalbum
Pseudopanax arboreus
P. crassifolius
Ranunculus reflexus
Rubus australis
R. cissoides
Schefflera digitata
Solanum nodiflorum
Streblus heterophyllus
Vitex lucens

Monocots

Acianthus sinclairii
Astelia solandri
Carex breviculmis
C. dissita
C. flagellifera
C. lambertiana
Collospermum hastatum
Cordyline australis
Earina mucronata
Eleocharis acuta
Freycinetia banksii
Gahnia xanthocarpa
Isolepis reticularis
Juncus australis
J. planifolius
Microlaena stipoides
Oplismenus hirtellus
Phormium tenax
Rhopalostylis sapida
Ripogonum scandens
Uncinia uncinata

Species recorded in earlier lists, but not seen by Bot Soc on 21 May 2012.

Arthropteris tenella (possibly confused with juvenile *Microsorium scandens*)
Asplenium appendiculatum (possibly confused with *A. gracillimum*)
Clematis cunninghamii (juvenile plants with deeply lobed leaves considered to be *C. paniculata*)
Coprosma areolata
Gahnia setifolia
Mida salicifolia (not usual habitat for this species)
Pennantia corymbosa (possibly confused with *Melicytus micranthus*)
