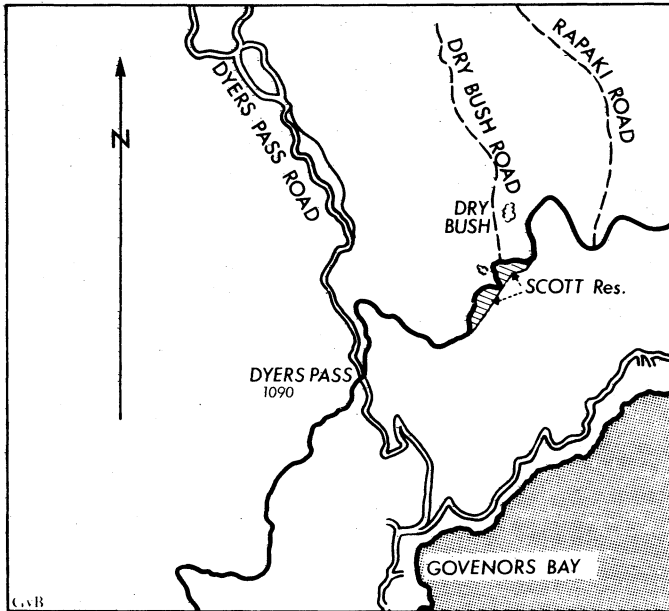


DRY BUSH, BANKS PENINSULA

N.Z.M.S. 1 S84 027490

M.J.A. Simpson



At the time of the settlement of Canterbury the vegetation of slopes of Port Hills, Banks Peninsula exposed to the dessicating northwest winds was predominantly grassland, but pockets of bush were present in the more sheltered valleys. One such valley, included in an area of 50 acres, R.S.127 selected by T.F. Peel on September 2nd 1850 was the locality known as 'Dry Bush' in the Province of Canterbury list of sections (see map). In 1854 it was advertised as consisting of "50 acres of freehold land, 12 acres of which are beautifully timbered ...." (Anderson 1927).

G. Ogilvie (1974) records that this bush was largely chopped out in the first two decades of settlement for firewood and fencing, but J.F. Armstrong (1870) could still list 98 trees, shrubs, herbs, lianes, parasites and ferns, 11 mosses, 2 lichens and 4 fungi from Dry Bush, of which he commented - "Another interesting locality in the neighbourhood of Christchurch and visible from our streets, is the so called Dry Bush, which from the numerous fires having passed through it, has a scorched appearance. Although there are some large coniferous trees in this small forest, it has more the characteristics of that portion of our bush vegetation which invariably edges our larger forests, of which Mount Pleasant bush is a still more characteristic representative ...".

In 1939 W.R. Boyce studied the grassland vegetation on the slopes near Dry Bush and included in his thesis a contemporary photograph of the diminishing patch of forest. The caption reads:-

"The tall dead trunk is a Podocarpus dacrydioides and behind it are two trees of P. spicatus. A single P. totara remains in this bush. Other trees are Plagianthus betulinus, Myoporum laetum, Hoheria populnea, Pittosporum eugenioides,

Suttonia species, Fuchsia exorticata, Nothopanax arboreum. The monotypic, endemic Tetrapathaea tetrandra is abundant. Altogether there are about 50 species other than grasses, sedges, and rushes. Cattle and sheep have destroyed all undergrowth and no regeneration is taking place. Severe wilting occurs during the summer months. The former limits of the bush are indicated by the trees on the hillside".

In 1968 the Summit Road Scenic Society agreed that the remnant of Dry Bush should be saved if possible; at that time stock had free access to the bush and the only regrowth was of stinging nettle and elderberry (C. Holdsworth pers.comm.). After negotiations with the then owner, Mr. Gibson, a line of fence was agreed upon to enclose an area of  $1\frac{1}{2}$  acres (0.6 hectares) and by late 1969, although now sold to the owners of the adjoining property, fencing was completed. Weeds became a problem with winged thistle prolific. This was cut down and a large patch of californian thistle was hand pulled to check seeding. Claytonia perfoliata formed a dense ground cover within the bush, especially on the eastern side. One season a prolific strike of kowhai seedlings was noted but they did not survive. In the following years the society carried out some planting on open grassy areas with a view to assist regeneration. Some details of the plantings have been provided by Mr. Cliff Holdsworth.

(a) From nursery grown plants:

akiraho (Olearia paniculata) well spread through open parts  
flax (Phormium tenax) gully  
toe toe (Cortaderia sp.) near gully  
cabbage tree (Cordyline australis) west side and gully  
houhere (Hoheria populnea) west side, north end

(b) From various sources:

ngaio (Myoporum laetum) east side, from Motunau  
ngaio (? M. serratum) west side from New Brighton  
koromiko (Hebe salicifolia) east side, north end. ? smothered  
by grass and died  
karamu (Coprosma robusta) west side, from local garden seedlings  
five finger (Pseudopanax arboreus) one, north end, east side  
of gully  
flax (Phormium tenax) gully, from plants higher up slope  
white pine (Podocarpus dacrydioides) one, netting around, n.end  
totara (Podocarpus totara) one  
lancewood (Pseudopanax crassifolius) two  
broadleaf (Griselinia littoralis) a few  
fig (Ficus carica) one

On March 27th 1975 Bryony Macmillan and I first visited Dry Bush on a day when persistent low cloud reduced visibility so that we had to follow a stone dyke, shown on the map (N.Z.M.S. 1 S84), from the road to locate the bush. Two previously planned trips had been abandoned because of rain. Some large trees are still present but the sole remaining white pine is outside the fence, isolated and unprotected from drying winds and extremes of temperature. Its continued survival seems doubtful. Inside the fence there are two healthy matai trees although one shows signs of recent wind damage. Otherwise some titoki, broad-leaf, milk tree and lemonwood are all that remain of Armstrongs 'Forest Trees'. The shrubs and small trees are better represented and most appear to be healthy. A small trickle of a stream that runs down the valley no doubt has beneficial effects. We recorded more herbaceous

plants than had been noted by Armstrong and although some may be recent arrivals, most would probably have been present in his time. Myrsine divaricata, the host today for Korthalsella was not recorded by Armstrong. This species does not appear to be a common plant at this altitude on the Peninsula. Of interest is the occurrence of the climbing senecio, S. sciadophyllous, not recorded by Armstrong but known to have been once present in Dry Bush by Laing who, writing in 1919, assumed it to be no longer there. On October 1st 1975, Dr. Lucy Moore, John and Phyllis Thompson, Janet Moss and I made further collections and records and John and Phyllis Thompson have made subsequent visits to check the flowering of some specimens. The list of species we recorded is presented here, following Armstrongs 1870 grouping. Species noted by W.R. Boyce in 1939 are indicated. Names used by Armstrong have been updated where possible, but sometimes it is impossible to know the species to which he referred. These are indicated (?). Eight trees, 25 shrubs, 3 parasites, 10 lianes, 31 herbs and 8 ferns are listed. Thirty-four adventive species noted in 1975 are listed separately; apart from two woody plants and one fern, all are herbaceous species: only two of these were noted by Armstrong. Mosses, lichens and fungi were not recorded.

The efforts of the Summit Road Scenic Society have given this historic scrap of valley bush a chance of survival. Already the protection from grazing has resulted in a dense herbaceous undergrowth thereby increasing the humidity within the bush. With continued protection future regeneration will be of interest.

1975	W.R.B. 1939 J.F.A. 1870	<u>FOREST TREES:</u>	1975	W.R.B. 1939 J.F.A. 1870
+	+	Alectryon excelsum	+	Carmichaelia juncea (?)
	+	Aristotelia serrata	+	Carmichaelia violacea
	+	Carpodetus serratus	+	Coprosma areolata
	+	Fuchsia excorticata	+	Coprosma crassifolia
+	+	Griselinia littoralis	+	Coprosma lucida
	+	Leptospermum scoparium	+	Coprosma parviflora
+	+	Myrsine australis	+	Coprosma propinqua
+	+	Paratrophis microphylla	+	Coprosma spathulata (?)
+	+	Pittosporum eugenioides	+	Coprosma rhamnoides
+	+	Podocarpus dacrydioides	+	Coprosma robusta
	+	Podocarpus ferrugineus	+	Coprosma rotundifolia
+	+	Podocarpus spicatus	+	Coprosma virescens
	+	Podocarpus totara	+	Cordyline australis
+	+	Pseudopanax arboreus	+	Coriaria arborea
	+	Pseudopanax crassifolius	+	Corokia cotoneaster
	+	Pseudopanax simplex	+	Discaria toumatou
	+	Sophora tetraptera	+	Fuchsia colensoi
<u>SHRUBS</u>		<u>SHRUBS AND SMALL TREES:</u>	+	Haloragis erecta
	+	Carmichaelia australis (?)		

1975  
W.R.B. 1939  
J.F.A. 1870

SHRUBS

SHRUBS AND SMALL TREES:

- + Hebe colensoi (?)
- + Hebe salicifolia
- + Helichrysum aggregatus
- + Hoheria angustifolia
- + Hoheria populnea
- + Leptospermum ericoides
- + Macropiper excelsum
- + Melicope simplex
- + Melicytus micranthus
- + Melicytus ramiflorus
- + Myoporum laetum
- + Myrsine divaricata
- + Myrtus obcordata
- + Olearia arborescens
- + Olearia paniculata
- + Pennantia corymbosa
- + Pittosporum colensoi
- + Pittosporum tenuifolium
- + Plagianthus betulinus
- + Pseudowintera axillaris
- + Sophora microphylla
- + Teucrium parvifolium
- + Urtica ferox

PARASITES:

- + Loranthus micranthus
- + Korthalsella lindsayi
- + Tupeia antarctica

LIANES:

- + Clematis paniculata
- + Clematis foetida
- + Clematis afooliata
- + Convolvulus tuguriorum
- + Metrosideros fulgens
- + Muehlenbeckia australis
- + Muehlenbeckia complexa
- + Parsonia capsularis var. rosea

1975  
W.R.B. 1939  
J.F.A. 1870

- + Parsonia heterophylla
- + Rubus australis (?)
- + Rubus cissoides
- + Rubus schmidelioides
- + Rubus squarrosus
- + Passiflora tetrandra

HERBACEOUS PLANTS:

- + Acaena anserinifolia
- + Acaena novae-zelandiae
- + Aciphylla squarrosa
- + Angelica montana
- + Astelia fragrans
- + Cardamine debilis
- + Carex diandra
- + Carex forsteri
- + Carex solandri
- + Carex ternaria (?)
- + Carex virgata
- + Colobanthus sp.
- + Dichondra repens
- + Epilobium alsinoides subsp. atriplicifolium
- + Epilobium macropus
- + Epilobium nummularifolium
- + Epilobium pallidiflorum
- + Epilobium rotundifolium
- + Geranium dissectum (?)
- + Geranium microphyllum
- + Geum urbanum
- + Hydrocotyle moschata
- + Hydrocotyle novae-zealandiae
- + Hydrocotyle distegus
- + Hydrocotyle effusus
- + Hydrocotyle sp.
- + Libertia ixioides
- + Luzula banksiana var. orina
- + Montia fontana
- + Oxalis corniculata

1975  
W.R.B. 1939  
J.F.A. 1870

HERBACEOUS PLANTS:

- + Pelargonium inodorum
- + Phormium tenax
- + Poa caespitosa
- + Poa sp.
- + Pterostylis graminea var. rubricaulis
- + Ranunculus pinguis (?)
- + Scandia geniculata
- + Senecio glomeratus
- + Senecio quadridentata
- + Senecio sciadophilus (1)

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(1) Of this species Laing (1919) says - "It was reported from Dry Bush (Lyttelton Hills) but is probably now extinct there".

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- + Senecio wairauensis
- + Solanum laciniatum
- + Stipa arundinacia
- + Tillaea sieberiana
- + Uncinia leptostachya
- + Uncinia sp.
- + Wahlenbergia gracilis

FERNS:

- + Asplenium bulbiferum
- + Asplenium flaccidum
- + Asplenium flabellifolium
- + Asplenium hookerianum
- + Blechnum "capense"
- + Blechnum fluviatilis
- + Blechnum penna-marina
- + Ctenitis decomposita
- + Pellaea rotundifolia
- + Polystichum richardii
- + Polystichum vestitum
- + Pteridium aquilinum
- + Phymatodes diversifolia
- + Pyrrosia serpens

1975  
W.R.B. 1939  
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MOSSES:

- + Bryum truncorum
- + Campylopus introflexus
- + Camptochaete ramulosa
- + Ceratodon purpureus
- + Cratoneuropsis relaxa
- + Dicranum (?Dicranoloma) dicarpum
- + Funaria hygrometrica
- + Homalia pulchella
- + Leucobryum candidum
- + Macromitrium erosulum
- + Polytrichum sp.

LICHENS:

- + Sticta latiflorus
- + Sticta filicina

FUNGI:

- + Agaricus campestris
- + Geaster fimbriatus
- + Lycoperdon novae-zelandiae
- + Polyporus sp.

ADVENTIVE SPECIES (1975)

- Agropyron repens
- Agrostis tenuis
- Anthoxanthum odoratum
- Bromus diandrus
- Bromus unilioides
- Carduus tenuiflorus
- Callitriche stagnalis
- Cerastium arvense
- Cerastium holosteoides
- Cirsium arvense
- Cirsium vulgare
- Cotula australis
- Dactylis glomerata
- Dryopteris felix-mas
- Euonymus europeus

1975  
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ADVENTIVE SPECIES (1975)

Galium aparine  
 Holcus lanatus  
 Juncus bufonius  
 Leontodon sp.  
 Lolium multiflorum  
 Lolium perenne  
 Montia perfoliata  
 Ranunculus repens  
 Ranunculus sclereratus  
 Rumex sp.

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Sambucus nigra  
 Sisymbrium officinale  
 + Solanum nigrum  
 + Sonchus oleraceus  
 Taraxacum officinale  
 Trifolium pratensis  
 Trifolium repens  
 Urtica urens  
 Vicia sp.

NOTE:-

Permission is needed to visit Dry Bush - from Mr. Brent Elder.

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