IN A 90-YEARS OLD GUM PLANTATION

ON THE CANTERBURY PLAINS

Bryony Macmillan

Pages plantation (Selwyn Plantation Board's plantation No. 70) three miles east of Darfield on the main west road, was first planted with unspecified gums in the early 1880's, when it was administered by the Canterbury Plantation Board (see Scotter 1965, p.151-153). The eastern end has remained in gums and provides a very pleasant walk under lofty trees.

The trees, <u>Eucalyptus obliqua</u> and <u>Eucalyptus pulchella</u> are up to 100 feet tall and are irregularly spaced. Many have fallen in the direction of the north-west wind, and from their trunks erect branches have grown. Saplings with juvenile foliage are abundant.

The shrub layer comprises lanky gorse (<u>Ulex europeus</u>) throughout, and some broom (<u>Cytisus scoparius</u>) near the margins. There is a dense ground cover of grasses, especially cocksfoot (<u>Dactylis glomerata</u>), and cleavers (<u>Galium aparine</u>) are common.

A few native plants are found: silver tussocks (Poa caespitosa) are occasional in clearings, Dichondra repens is common, creeping on the more open ground, and fireweed (Senecio glomeratus) is scattered, with Senecio quadridentatus occasional. I have found a single slender-stemmed plant of Clematis paniculata and two scrambling plants of a cut-leaved clematis referred to C.australis.

Mosses are conspicuous on fallen logs and on the ground. Most common are Hypnum cupressiforme on logs and ground, and Sematophyllum contiguum, which forms extensive soft mats on decaying and leaning logs. The leafy liverworts Lophocolea semiteres and Cephaloziella exiliflora are also found here.

On shaded ground are patches of <u>Thuidium furfurosum</u>, Rhynchostegium tenuifolium, and clumps of <u>Bryum billardieri</u>. Typical of the bare soil of upturned root-plates is <u>Ditrichum elongatum</u>. Astomum austrocrispum, <u>Bryum sauteri</u> and <u>Fissidens anisophyllus</u> are also found in this habitat.

On soil at the south sides of large trunks are found Brachythecium velutinum, B.salebrosum and Leptotheca gaudichaudii. Dicranoloma robustum was found once on a decayed log.

Many of these mosses belong to the beech and podocarp forests of the foothills, as do the <u>Clematis</u>.

The only introduced moss is <u>Brachythecium velutinum</u> of the northern hemisphere, which was first recorded in New Zealand by Allison (1952) with many collections made in Otago. There it is fairly common, although infrequently collected elsewhere.

A surprise was to find an ancient horse's skull thickly covered by a species of Tortula bearing gemmae on its leaves.

This gum plantation is scheduled for conversion to Pinus radiata in 1974 (Selwyn Plantation Board Annual Report 1972). The beauty of its towering trees with their smooth limbs and flaking trunks, and the diversity of its moss flora cause me to regret this.

I thank the Selwyn Plantation Board for permission to enter the plantation and to consult early records, Miss Lynda Stemmer and Mr. W.R. Sykes for the collection and identification of <u>Eucalyptus</u> specimens, and Mr. K.W. Allison and Mr. J.T. Linzey who examined specimens of Brachythecium, Astomum, liverworts, and Bryum.

REFERENCES

Allison, K.W. 1952: New records of northern hemisphere mosses in New Zealand. Trans. Royal Society N.Z. 80, 233-35.

Scotter, W.H. 1965: A History of Canterbury Volume 3 1876-1950. Christchurch. 547 pp.

Selwyn Plantation Board Annual Report 1964 and Review of First Fifty Years.

Selwyn Plantation Board Annual Report 1972 and Plan of Operation 1972-80.

MORE ABOUT OPHIOGLOSSUM

By: Brian Molloy

Comments on Ophioglossum by John Thompson in past numbers of this Journal prompts me to add a few observations of my own on this delightful but elusive little fern.

My first live encounter with Ophioglossum happened some years ago whilst investigating changes in the botanical composition of tussock grasslands in Otago following normal burning practice.