FENCING OF RESERVES.

JOHN THOMPSON

To fence, or not to fence: that is the question? And a silly question too. Everybody knows that if you have a reserve of native plants you must fence it, well almost everybody.

I should like to tell you about a reserve for the fencing of which I was partly responsible. The story is as accurate as I can make it. Reserve 101, commonly known as the Lyttelton Reserve, is an area of some 50 acres that was set aside by the Canterbury Provincial Council in 1866 as a Reserve for a Botanical garden. It is a rectangular block running from a point a little below the Mount Pleasant Trig Station down towards Lyttelton. It is steep country with rock outcrops,caves, a precipitous bush clad gully and grassy slopes.

On the dissolution of the Canterbury Provincial Council the Reserve was transferred to the Lyttelton Borough Council. What the Provincial Council did with it is not known, but the Lyttelton Borough Council leased it to a farmer whose land adjoined it at a rental of 16 pound N.Z. per annum. It continued to issue successive leases at the same rental until 1961. When an enterprising Councillor moved a motion that the lease be cancelled and the Reserve be fenced. The motion lapsed for want of a seconder.

Quite some time previously the Council had legally changed the purpose of the Reserve from that of a Botanical Garden to land for Public Buildings. What caused the Council to change the purpose of the Reserve and what public buildings it was proposing to erect on this excessively steep and rocky land remains a mystery.

I pointed out to the Council that, in my opinion, it had no power to lease land set aside for Public Buildings without obtaining consent of Parliament and suggested that it obtain legal advice. The Borough Solicitors confirmed that the Council had no power to lease the Reserve.

The current lease was therefore cancelled and the farmer instructed to remove his sheep. As the long boundary between the Reserve and the tenants' farm was unfenced these instructions could not be enforced. The reserve therefore continued to be grazed.

A later Council agreed to pay its share of fencing costs and after some difficulties the Reserve was fenced and stock finally excluded in 1965.

My wife and I had commenced listing the native plants growing in the Reserve in 1962 paying some 30 visits. By the time stock was excluded we had compiled a comprehensive list of native plants, totaling 171 species, and were in a position to monitor any possible changes in species due to fencing. 171 species on a 50 acre block is a surprising number considering that the area had been grazed continuously for at least 80 years.

After the enclosure we visited the Reserve from time to time and noted its progress. One early result was that the grass grew vigorously smothering some of the smaller herbs and creating a fire risk in summer.

A small patch of gorse and a number of small patches of broom had existed for some years but had been kept in check by spraying and grazing. Unchecked broom now spread at an increasing rate. After 10 years much of the grassland was dotted with broom bushes some areas being thickly covered. The upper track became impassible. On two occasions I reopened that track with the help of secateurs.

During the next four years brooom spread further. One could envisage the Reserve being a thick mass of broom in the future.

A rough check with the species list showed that at least twenty four species on the list no longer existed.

The regeneration in the bush gully was disappointing. Urtica ferox had spread in some areas making progress difficult. Arthropodium candidum had spread along the upper margin of the bush but had later died away. Some increase in fern plants was noticed: there were only a few tree seedlings with a few shrubs under the bush, with no apparent new native shrubs on the bush margins, broom had taken over on these bush margins.

So after 14 years of stock exclusion we could produce the following Balance Sheet:

Advantages due to fencing	Disadvantages due to fencing
Growth of Urtica ferox	Cost of fencing
Some increase of ferns	Loss of value of sheep meat and wool
Some new shrubs and a few tree seedlings	Loss of at least 24 species of plants
	Very large infestation of broom
	Fire risk created in summer

I used to be an enthusiastic pro-fencer of Reserves. After the above experience it is clear that the proverb concerning fools and angels had applied. We should have done better by leaving it to the sheep.

Then came the transformation. At a later visit hardly any broom remained. Not only had the broom been slashed but the slashings had been removed. the Reserve looked cleaner than it had done for years. Someone had footed a large bill for this work.

The next surprise was to see signs of grazing, by a sizable flock of sheep judging by the droppings. On our next visit heavier grazing was apparent. We decided to traverse the Reserve from the bottom to the top through the precipitous bush gully.

This we did on 5th September 1981. Damage by grazing was very apparent. Few ferns had escaped most were grazed to ground level. It was difficult to find tree or shrub seedlings, shrubs had been eaten, even the Urtica ferox looked thinner. What regeneration that had taken place was wiped out. We were unable to find specimens of Macropiper, Black pine or supple jack. How had the sheep gained entry? The gate leading from the Reserve to adjoining land was missing.

So ends my cautionary tale with the Reserve being grazed, as before, regeneration of the bush being non existent and the number of native species being reduced by some 30 species.

BAUMEA RUBIGINOSA

JOHN THOMPSON

We are pleased to record the finding of Baumea rubiginosa on a site new to us (on Saturday 24th April 1982.) In the Bottle Lake Forest Park there are many damp areas containing a variety of Juncus plants. One such area on the "blue" track, left hand branch, some half hours walk from the sawmill, has a small patch of Baumea rubiginosa bearing a dozen culms. These were mixed with Juncus plants which probably accounted for the moderate height of the culms, around 50 cms.

We spent some time examining the surroundiong area but were unable to find further Baumea plants.