RICCARTON BUSH

L.W. McCaskill

1920: Dr. Leonard Cockayne: "It must be emphasised that the Bush is the last portion on the globe of a special type of forest. But do those to whom it belongs - not the people of the district alone but all New Zealanders - recognise how beyond price is this piece of ancient forest?".

1938: Dr. Carl Skottsberg, the great Swedish botanist, expressed his high appreciation of the way in which this native forest within a city area was being cared for.

1949: Dr. Olaus Murie, President of the U.S. Wilderness Society: "The preservation of Riccarton Bush is one of the notable features in the story of conservation round the world".

It is nearly 50 years since the bush was given to the people of Canterbury by the Deans family with the condition that the area was to be preserved for all time for the growth of native trees and plants, and 120 years since the original John Deans expressed a wish that every endeavour should be made to preserve the bush from destruction. Perhaps it is time we had a look at our stewardship and consider whether we might not do better than we are doing. A little history may help our musings.

The original bush had an area of 23 hectares and extended to Riccarton Road and nearly to Straven Road. In 1850 the Deans brothers gave about half the area of bush to the Canterbury settlers for building timber and firewood and after clearance for housing and farm land the Deans still had eight hectares which they always thought of as a reserve. Settlement inevitably opened up the margin to the effects of wind and to alleviate this a belt of English trees, mainly oaks with some ash, was planted on the north-west and south-west sides. For many years they did an effective job but as the marginal land is now entirely covered with houses, gardens and trees, they are no longer necessary; in fact they have made that side of the bush extremely dry and are a big handicap to natural regeneration. In the middle of the bush totara and matai were used for building by the Deans but these were replaced by oaks.

Over the years the inevitable happened with settlement and with the paving and guttering of streets the bush became progressively drier as the stormwater quickly ran to the Avon instead of gradually being absorbed in the swamp forest. Also with the bush becoming the main roost for vast numbers of introduced birds, seeds of garden shrubs and weeds of all kinds were deposited on the fertile ground and thrived.

(This still happens of course and at least one hundred exotic species have been found in the area, some of them serious competitors of regenerating natives). By 1914 then, although the reserve still looked like a swamp forest it was overrun with blackberry, elderberry, wild cherries, ash, oak, sycamore and a host of other foreigners. So this was the condition which faced the Board of Trustees which took control of the bush when the Deans family gave an area of 6.3 hectares to the people of Canterbury in 1914. A ranger, John F. Tickell was appointed, and the Christchurch City Council built a house for him, and helped pay his salary for the next 16 years. As a one-man band he did a tremendous job in tackling the weeds and cutting out many of the exotic trees on the south side.

The diminutive Len Armstrong was ranger from 1935 until 1957. One of his early jobs was the removal of oaks in the interior of the bush and he persevered with these until in 1950 he had cut and sawn the last of them and pushed the logs to the gate in a wheel barrow. The whole of the cleared area has long been a broadleaved thicket with pokaka, kahikatea and lancewood regenerating freely. Armstrong's struggles with the smaller weeds were aided by students of the Teachers Training College. As part of their practical work for their biology certificates they were required to spend two hours pulling weeds. On Saturdays in the mornings for several weeks in the year from 1935 to 1945 the paths were piled high with the annual crop of weed growth. One of the useful jobs the students did was to reduce the harmful effects of the native Muehlenbeckia australis or pohuehue a scrambler climber which had greatly increased with the increased light provided by tracks and the removal of oaks. This plant should always be considered a major enemy of many of the other natives.

By 1945 the drying out of the bush had produced serious effects; all the matai were dead and most of the totara, and natural regeneration was insufficient to replace them. Then came the big storm of 14th July 1945 when 18 inches of snow sat on the trees and the masses of pohuehue doing tremendous damage.

The heavy frosts following the snow killed all the titoki trees. The original trees which grew in the bush were said to have been killed in the big frost in the 1860's when Lyttelton Harbour had ice on it. Some had been planted in 1925. When the mess was cleared up much ground was exposed to the incoming of weeds but it also provided space for the planting of nursery-grown totara and kahikatea donated by the Education Board. It was obvious that the future of the bush must depend on silvicultural practices and a nursery was established in which many hundreds of kahikatea, totara and matai were propagated. The pupils of Moana, Ahaura and Totara Flat Schools in Westland took a great interest in the project and collected hundreds of seedlings of the three podocarps.

In 1946 the Deans family proposed to sell the Riccarton House site and adjoining parkland and private bush for housing. Mr. W.B. Brockie, the Royal Society representative on the Board of Trustees, considered it was vital to the future of the bush, to acquire the Deans land and reserve it for all time. The Canterbury Progress League called a public meeting in August 1946 with the result that the Christchurch City Council, Riccarton Borough Council and the Waimairi, Paparua and Heathcote County Councils agreed to purchase the property, to add it to Riccarton Bush and provide future annual finance by rating. The new arrangement came into force in March 1948 and early successful attention was given to the improvement of the parkland to make it suitable for public use. A big problem was the two hectares of private bush added on the north-east side. In addition to being overgrown with blackberry, elderberry, ash, sycamore and spindle trees the area had long been used as a rubbish dump. The herculean efforts of Armstrong and his assistant aided by the Forest and Bird Protection Society produced the transformation to be seen today. The weeds were cut and burned, the rubbish was carted away and many hundreds of trees and shrubs planted and subsequently carefully tended. This area better than any other demonstrates how successful silvicultural practices can be in preserving and extending a piece of native bush.

The brief remark in the 1950 report to the Royal Society: "The last large totara which had been dead for many years became dangerous and was felled"; hid the true story. Growing at the northern end of the private bush this totara, four feet in diameter, rose 40 feet to the first branch and the spreading top. One Saturday morning with several members of the Forest and Bird Society, I was cutting blackberry while Armstrong burned it. A spark caught the powdered bark in the high fork of the tree and soon the crown was well alight. The Christchurch Fire Brigade arrived promptly but all their engine power and all the water in the Avon could not reach the flames. The foreman's decision was: "You cut the tree down and call us back to put out the fire" - Unbelieveable? - but true. So Armstrong and I sawed for well over an hour, the Brigade arrived, someone got some fine timber, and the magnificent stump is there today.

Subsequent work in the enlarged bush has involved control of weeds, improvement of paths, planting of bare ground with nursery-grown stock, but above all the introduction of irrigation after a successful trial in 1959. Using polythene piping much of the bush can now be kept wet in dry periods and this has been an important factor in the better condition of many of the large trees and in the establishment and growth of the young ones.

My study of the bush has led me to the following conclusions :-

(1) An area of about two hectares, in the middle and to the south-west, can be considered to be so nearly natural in condition that we may be able to prevent any major deterioration. It will need irrigation when required, extermination of weeds (especially the English male fern), and judicious control of pohuehue. Possibly, and regrettably, it may have to be fenced.

(2) Treating the rest of the bush in broad terms I would advocate:

(a) Reducing the number of tracks to ensure less exposure in some critical areas

(b) The war on weeds must be looked on as one which will always be with us

(c) Annual plantings of bare spaces in the interior of the bush should be continued, followed by release from competition. Hinau should be included (there are only two trees left).

(d) The mass of oak, ash, sycamore and poplar on the south and south-west margins should be removed

(e) The belt of oaks on the north-west margin should be removed in two stages - the innermost trees now and the remainder in a few years

(f) A 10-year plan should be prepared for the close planting with natives of all open spaces in the margins.

The action suggested will not restore the primeval character, structure and composition of the bush but it would give us for all time in the heart of this big city, a complete collection of the plants originally growing in the bush, growing in an association not so very different visually from that which greeted the pioneers.

CAREX INOPINATA

By: John Thompson

Carex inopinata has been found only in the limestone country in the Castle Hill Basin. I collected a small portion of this sedge, with leaves up to 8 cm. long, on the 25th March, 1972 and placed it in a 6 inch pot in ordinary potting soil to which a heavy dressing of crushed limestone had been added.

By the 31st December 1972 the plant had spread completely filling the pot with a very thick healthy growth of leaves up to 8½cm. long. The roots had reached the bottom of the pot around its sides but had only grown 5 cm. long in the centre, due perhaps to inadequate watering.