

SPINIFEX HIRSUTUS IN CANTERBURY

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The silvery sand grass, Spinifex hirsutus is a sand-binding species of great beauty. It is the only New Zealand grass that bears male and female flowers on different plants and the large seed heads bowling along the coastal sands are a common sight on northern beaches. On eastern coasts the southern limit of spinifex today is at Cape Campbell, Marlborough but at one time it was present in Canterbury as far south as the beaches at New Brighton. It has not been recorded from Kaitorete Spit where the coarser sands may not have been suitable.

The species was first collected in Canterbury by W.T.L. Travers (Hooker 1864-7, Cheeseman 1906, 1925) but no precise locality is given. Later J.B. Armstrong (1879) indicated the distribution for Canterbury as "littoral and local". There are good specimens in his herbarium of female plants from New Brighton, annotated "creeping widely", and of male plants from the mouth of the Avon, both collected in 1870. Cockayne (1906) gives the distribution of spinifex in the South Island as "N. and N.E.", and later (1911), says "as far as Gore Bay in the South". Wall (1922), however, noted that a large patch of male plants grew at the very end of South Beach, New Brighton - "on the outmost dune, quite close to the sea, about quarter of a mile from the Estuary". He added that "the grass used to be plentiful on North Beach also". Later (1953) he reported "the encroachment by the sea upon the sandspit at the mouth of the estuary of the Avon and Heathcote rivers has destroyed the only locality known to me for the beautiful sandhills pimelea, P. arenaria and Spinifex hirsutus".

In his column "Down to Earth" published in the Christchurch Star on May 12, 1973 H.W. Beaumont made reference to spinifex. "We used to see the seed heads of silvery sand grass, spinifex, doing a similar peregrination (bowling in the wind across the sand) among our sandhills but something has occurred and the useful sand-binding spinifex is no longer seen in this locality".

I rang Mr. Beaumont who told me that his memories were of the North Beach area where Rothesay Road entered the sand dunes, about thirty years ago. There were therefore seed bearing plants on North Beach as recently as the 1940's.

Early this summer Ruth Mason and I searched for some distance north and south of the locality mentioned by Mr. Beaumont but could find no spinifex. Today most of the area behind the foredunes is

planted with pine forest and the dunes and interdune hollows are dominated by exotic species. Marram grass, Ammophila arenaria, is the principal sand-binder and foredunes, harsh in outline, are stabilised with this species to the strand line. Spinifex is a very palatable grass and may have been cropped to extinction by rabbits and other animals in Canterbury although it has been able to withstand considerable grazing pressures elsewhere in the country.

Whatever the reason, it is a pity that this attractive and interesting species and its landscape form of gently contoured dunes has disappeared from local beaches.

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