

THE RISE AND FALL OF CELMISIA ADAMSII VAR. RUGULOSAM. Bellingham & C. Devonshire

Celmisia adamsii var. rugulosa is known mainly from the population on Mt Manaia, in particular from Manaia's wife and her two daughters (the pinnacles north of Manaia).

But other localities are known to local botanists, and recent searches along Manaia ridge have uncovered other populations of C. adamsii. The most exciting find was hundreds of plants in tall, open manuka scrub with a dense Schoenus tendo ground cover.

Other populations have also been confirmed at Kauri Mountain (NE of Manaia), McLeods Bay and Bream Head. Two searches of Mt Aubrey have failed to find a population that was on the rock outcrops until recently (K. Reynolds pers. comm.).

Although C. adamsii grows on rock outcrops and shaded cliffs, some of the present populations are growing under manuka scrub in clay soils on easy slopes. This leads us to a number of questions about the former distribution of this Whangarei Heads inhabitant -

Has the area of C. adamsii habitat been reduced mainly to rock outcrops?

Could its main habitat have been open scrubland in pre-European times?

Where would it have been found in pre-Maori times?

Whangarei Heads has a rich Maori history, original settlement may date back 1,000 years. European settlers arrived in the 1850s and farms and orchards were established. Vegetation clearance for farming probably increased after the first dairy factory was started at Parua Bay in 1904, and today farmland covers more than 70% of Whangarei Heads.

In the past 1,000 years vegetation of this area and the habitat of C. adamsii would have changed considerably. It appears likely that it was restricted to rock outcrops, bluffs and slip sites before the arrival of the Maori.

The shifting cultivation patterns of the Maori would have increased the area of open shrubland. Kumara was mainly grown on the warm sunny areas on the north and west facing slopes, but firing would have continued into cooler eastern and southern slopes, which provide good conditions for C. adamsii. Early European farming would have increased the area of open scrub for extensive grazing, possibly providing an even greater area of C. adamsii habitat.

Today it can be found on the edge of pasture on the north-west slopes of Manaia ridge, and it grew in poor pasture at Parua Bay until the 1950s.

More intensive farming methods or fertiliser applications may lie behind its disappearance from most of the Whangarei Heads lowlands. The recent decline of Celmisia adamsii var. rugulosa may be part of a cycle of expansion and decline, which has been induced by man's activities.