Rare plants of Waima Forest

by Lisa Forester

The Hauturu trig, looking east to Mt Misery, the highest point in Northland. Several new plant species have recently been discovered along this Waima range.

On cold, south-facing, wind-blasted cliffs along a range which rises to Te Raupua, the highest point in Northland, grows a strange community of plants including two recently discovered species which have been found nowhere else. One is a leathery leaved *Olearia* which grows into a small tree. The other is a strikingly different *Coprosma*. Both are seriously threatened by goats and possums.

It is remarkable that two such conspicuous plants should have remained undiscovered when the ridgetop above their habitat is well used by trampers. The fact is that their territory is one of the coldest, dampest and most inhospitable places in Northland. The plants grow on the upper slopes of the Waima Range on forest and scrub-covered ledges and near-vertical basalt cliff faces where only the keenest tramper or botanical enthusiast would ever attempt to visit.

The story began a few years ago when John Beachman, now District Conservator for the Department of Conservation in Kaikohe, collected, below Hauturu Trig, a robust, shiny leaved *Olearia* that he did not recognise. The plant, which has large, bronze-backed leaves, was identified as a new species.

Anticipating that there might be other rarities John and I made another visit to Hauturu in 1986. Clambering around on the steep cliffs and ledges below the trig we found a *Hebe* previously known only from similar country in Herekino Forest, south of Kaitaia and from a gorge cut into the Ahipara gumlands plateau. We also found a very odd looking *Coprosma* with upright stems which branched sparsely, and with large, distinctive leaves.

This *Coprosma* differs from all the other New Zealand coprosmas in having enlarged leaf bases and greatly-reduced petioles, or stem. The plant grows to around three metres in height, sometimes collapsing down the cliffs and sending up new growth from the old stems.

On subsequent visits with botanists Helen and Tony Druce, Anthony Wright and Ewen Cameron we were lucky enough to catch both sexes of the *Coprosma* at various stages of flowering and we also found plants fruiting. A stem of the *Olearia* in bud, collected in late November, burst into spectacular sprays of white daisies a week later. Both plants are being described at present.

Suspecting that these and perhaps a few other oddities might be found on similar topography in other parts of Northland we began a search of possible habitats. So far we have checked areas in Warawara, Herekino and Waipoua forest without success, but there is still a lot more country to cover. In Waima Forest we have recorded further populations of the *Olearia* and *Coprosma* four to five km east below Te Raupua, the highest point in Northland, and below Mt Misery. These preliminary investigations suggest that it is likely that the plants will be restricted to the main Waima Range. A more comprehensive survey of the whole forest is needed and we intend, this year, to produce a status report for the plants as well as a fuller description of their habitat and associated species.

Ancient Relics?

An intriguing question is whether the new species are ancient in origin, perhaps Ice Age relics clinging tenuously to a remnant of what was a much wider habitat. The total absence of the plants, even as seedlings, in the surrounding bush suggests that they do not compete well in a closed-forest environment. Maybe comparison of the fossil pollens will shed some light on these questions. Tony Druce, who is describing the *Coprosma*, has found that it is closely related to *Coprosma grandifolia*, previously regarded as the sole representative of a distinct group.

Goats and Possums

Unfortunately goats and possums are having a heavy impact on the Waima cliff habitats. The skeletal soils, kept damp under the forest canopy, are prone to erosion, making the habitat very fragile. Even human footsteps cause a surprising amount of damage.

The Hauturu habitat is in relatively good condition although the *Olearia* and *Coprosma* occupy less than a hectare. Elsewhere much of the *Coprosma* has been chewed to a stubble and only survives in areas too steep or too dense in vegetation for the goats to reach. The *Olearia* is a little more widely distributed, inhabiting some of the less steep areas and some of the ridgetops. Nevertheless it is still vulnerable as it is