Coastal Plants of South Taranaki

9 DEC 1992
COLIN OGLE

Where can we see a native forget-me-not with flowers the size of a full stop on this page? Or plants of native carrot, mint, plantain, buttercup and daisies, each of which can be covered by a 20 cent piece? Such tiny botanical curiosities are concentrated on South Taranaki's doorstep, but not many people know they exist, let alone can claim to have seen them.

Few parts of New Zealand appear, at first sight, to be so unpromising for finding native plants as the coast of South Taranaki. Dairy cows seem to graze right to the tops of the sea cliffs, cliffs which drop sheer into the sea or on to storm-wracked boulder beaches. Where is there a place for native plants?

A coastal survey by DSIR botanist Tony Druce in the 1970's revealed over 300 species of native coastal plants between Hawera and Waitara and most of these can probably be found in the southern half. This is an amazingly rich variety, considering the very modified nature of the coast.

Several of the few less rugged places on the coast are occupied by beach settlements, like Ohawe, Kaupokonui, and Opunake. Gardening is difficult here, and shelter and shade are usually priorities. The original native plants have fared badly in competition with hardy exotic plants which home owners have preferred, plants such as hedge wormwood (Artemisia arborescens), agapanthus, and yucca, and even the planted trees and shrubs are exotic pines, macrocarpa, Norfolk pine, boxthorn and pohutukawa. (Yes, pohutukawa really belongs in this category of exotic plants of the South Taranaki coast, for its natural southern limit was probably somewhere around Urenui; people who valued its hardy and attractive features planted it widely, well beyond its original range and today it even establishes itself.) Sometimes, of course, true natives of South Taranaki are planted as well, species such as harakeke (NZ flax) and taupata.

Three of the most conspicuous grasses of ungrazed or lightly grazed coastal sites are known as marram, kikuyu, and buffalo grasses - all are very hardy, but none are native to New Zealand.

So what of the real native flora of this coast? A walk along the beach or the cliff tops, and maybe a careful foray on the cliff faces themselves (for there are many spots where the cliffs are by no means vertical, and plants and people may both find a toe-hold) will reveal many native plants to a careful observer. Some of these are shrubs or trees: eg. taupata, ngaio, karo, karaka and mahoe. Karo, like pohutukawa, has extended south of its natural range by spreading from plantings of it and karaka may have spread from pre-European Maori plantings. Harakeke, toetoe, ferns and numerous small herbs, occur on the South Taranaki coast, just as in many other parts of New Zealand. The small herbs include native species of lobelia, groundsel, buttercup, mint, plantain, cotula, gunnera, spurge, and distant relatives of the garden primrose, spinach, and carrot. The tiny forget-me-not mentioned above has been aptly named Myosotis pygmaea var. minutiflora (the pygmy forget-me-not with minute flowers).

Some of the species are known from few other parts of NZ. For several, the South Taranaki coast is the only North Island location. To the home gardener, the best-known of these is probably Hebe elliptica, which has been much-used in hybridising to produce garden Hebe cultivars. The only North Island site for its "pure" typical form is on the coast near Manaia but it is more common in the west and south of the South Island.

A green, hairless form of the fleshy-leaved buttercup, Ranunculus recens, is only known from the coasts near Manaia and in north-west Nelson. Its relationship to brown hairy buttercups given the same name near Waiouru and Dunedin is yet to be studied. The two types may be different species. Similar naming problems apply to a type of native carrot (Oreomyrrhis) near Manaia and a broad-leaved form of native angelica (Scandia rosifolia) from Ohawe.

Another curious plant of this coast is a form of the widespread sand coprosma. On coasts elsewhere it grows on sand dunes and forms tangled bushes to half a metre or more tall, but in South Taranaki it grows on cliffs in tight, almost prostrate, mats. It keeps this form in cultivation and is becoming a popular groundcover plant in gardens.

A minute species of crassula, whose leaves are smaller than pin-heads, is known only from the Taranaki coast and was named Crassula manaia just 4 years ago. It is now known from near Cape Egmont to Waverley, but is regarded as a threatened species. Two more small herbs seem to be even more restricted in their ranges, and neither has yet been formally named. Both are in the genus Limosella, distant relatives of foxgloves and snapdragons; one is in a single spot near Opunake, and the other, which was only recognised as distinct species last year, is confined to cliff ledges from Manutahi to Kakaramea.

Other nationally threatened species on this coast include plants which once more widespread than they are today. They include NZ spurge (Euphorbia glauca) and pingao, a sand-binding sedge which has cultural importance to the Maori for weaving because its tough leaves remain bright gold when dried.

There are also some tantalising links between native plants and small, often unseen native animals. The late Dr Ken Fox of Manaia found a species of native moth whose caterpillars feed only on native cliff daphne (Pimelea urvilleana). How many other species are inter-dependant in this way?

Clearly, there is still much to be learnt about the coastal plants of South Taranaki. Why are Crassula manaia and the two unnamed Limosellas not found anywhere else? Why are several plant species shared with the northern South Island rather than other places in the North Island? How different are South Taranaki's distinctive forms of native buttercups, carrots, sand coprosma, and angelica?

Even more urgent is a need to know how to best protect this coastal vegetation. Some is being grazed by livestock, and wild animals such as possums and rabbits have access to even more. Weeds, including boxthorn, pampas and pasture grasses, threaten to smother some areas. Erosion of the cliffs from natural processes has been accelerated by quarrying, construction of tracks, and diversion of water and liquid wastes. Use of off-road vehicles and other recreational pursuits have already destroyed many plants and their habitats.

The Protected Natural Areas programme recommended four special areas for protection between Hawera and Opunake in 1986, and this year added four more between Hawera and Waverley. None of these are formally protected yet.

It would be tragic if we were to lose forever some native species or important sites, but the general scarcity of native vegetation on this coast makes every piece important. Every one of us who visits the coast, as well as those who live there, can play a part in protecting these irreplaceable fragments of our natural heritage.

Colin Ogle
Conservancy Advisory Scientist
Department of Conservation
Wanganui Conservancy

9 December 1992