Motutapu cannot be treated in isolation regarding weeds. Not only must Rangitoto be closely looked at as well, but other islands and adjacent mainland must be managed to control weeds if Motutapu, Rangitoto and other gulf islands are to be protected from aggressive environmental weeds species in the long term, e.g. look at the increasing spread of rhamnus in the Gulf. This spread will increase for bird-dispersed species as native bird populations are restored on the gulf islands.

It must be remembered that volcanic Rangitoto Island and its flora is recognised as unique in New Zealand and therefore environmental weeds must not be allowed to spread on to it from Motutapu, and interfere with the fascinating regeneration occurring there.

There are still many aggressive Auckland weeds that appear not to have reached Motutapu or Rangitoto yet. These islands should be regularly monitored to eradicate such species if they ever arrive, e.g.

Acmena smithii monkey apple (native pigeon distributed seed)
Ageratina riparia mist flower (wind distributed seed)
Asparagus scandens climbing asparagus (bird distributed seed)
Hedychium gardnerianum Kahili ginger (bird distributed seed)
Polygala myrtifolia sweet pea bush (water? wind? distributed seed).

Urgent weed eradication is required on both Motutapu and Rangitoto. There are several potential aggressive species not well established yet (e.g. bone-seed and Port Jackson fig), and initial effort should be directed towards eradicating their small existing populations. Other species if left will have a much larger impact than they currently do and they also require urgent management, e.g. "high" and "highest" priority weeds in the Weed Species List. A weed strategy for the inner Hauraki Gulf and relevant parts of the adjacent mainland is long overdue.

The exact locality of weeds mentioned is known and could be marked on maps if required.

Acknowledgements

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Wahlenbergia gracilenta (Campanulaceae)

R.O. Gardner

The recent revision of *Wahlenbergia* in Australia (Smith 1992) has allowed me to identify the following specimen as *W. gracilenta*, a new record for New Zealand. " North Cape region, Waitanoni Stream, rare, on dry rocky slope by waterfall, *A.E Wright* 9510, 30.11.89, AK 189997".

This species differs from its congeners in being a diminutive annual.

W. gracilenta Lothian
Plant annual, with a slender taproot, single or few-stemmed, the stems to c. 35 cm tall (but often only 5-10 cm tall); lower leaves us. opposite, obovate-elliptic, hirsute; sepals narrowly oblong; corolla us. blue (occ. whitish or pinkish), campanulate, the tube to 4 mm long, the lobes to 5 mm long, style to 5.5 mm long, considerably expanded in the pollen-collecting zone (distal 1/4-1/2 of style), with or without a gland below the cleft between each stigma; capsules us. subglobose, to c. 7 mm long, us. hirsute; us. in open dry sites, in southern Australia incl. Tasmania, and in N.Z. (apparently as a recent adventive).

Wahlenbergia is a difficult genus in the herbarium because there are a fairly large number of closely related species (25 in Australia) whose best differential characters are found in the corolla and style (see above description). Not only are these awkward features to observe in dried material but in a great number of specimens the open flowers and often the buds too have been completely chewed away by herbarium pests such as psocids. Collectors could help by noting the relevant floral details (at least the colour and proportions of the corolla), and also by adding to any packeted flowers an insect-repellent, such as thymol crystals.

Reference

Smith, P.J. 1992 A revision of the genus *Wahlenbergia* (Campanulaceae) in Australia. *Telopea* 5: 91-175.

Trip to Pukekaroro Scenic Reserve
20 November 1993

Alistair MacArthur

ABS members gathered in spite of an uncertain forecast and dark skies, to be rewarded by a pleasant sunny outing as the day progressed. About twenty five people, including two children, made their way up one side of the imposing hill just north-east of Kaiwaka, and after lunch on the summit went down a ridge on the other side. Besides seeing many plant species, we had a remarkable opportunity to see well preserved evidence of the past history, when many Maori people must have lived there.

It was good to see a strong, high fence around the forest as we started up the hill. Progress up the next few hundred metres was slow as members spread out among the regenerating kauri to look at many species close to the ground, as well as interesting trees and shrubs among the kauris. Orchid enthusiasts were evidently delighted by the surroundings. In a few minutes a *Caladenia* in flower was found, and soon afterwards flowers on a *Thelymitra* species, *Pterostylis rubricaulis* and *P. banksii*. *Drymoanthus adversus* (in flower) was seen on the way down and a group of flowering *Pterostylis banksii* again. There was ample evidence that a number of other genera including *Corybas* would be seen in due season.

Toatoa, *Phyllocladus glaucus* trees were present in many places on both sides of the mountain. One displayed very large cladodes. Fairly high up the track, just at the left and growing on the ground, there is a fine specimen of *Pittosporum cornifolium*, more usually seen as an epiphyte. This also displayed large leaves for its kind, or at least they seemed so to this observer. On the way down the eastern side we went just off the ridge to look at one of several large kauris of the original forest, which has a *Metrosideros albiflora* climbing up to its lower limbs.

Some mention must be made of the fortification trenches and storage pits which are such a marked feature of the high parts of the mountain. They are astonishing in size, number and their