A visit to The Noises Islands, Hauraki Gulf

Steve Benham & Mike Wilcox

A fine, calm, autumn day on 7 April 2008 saw a group of nine ashore on the Noises Islands for a day of botanical exploration. The group was: Rod Neureuter, Geoff Davidson, Bev Davidson, Nick Waipara, Lisa Clapperton, Mike Wilcox, Steve Benham, Peter Hutton and John Millett. We were especially glad to have Rod Neureuter along with us as he is one of the owners of the Noises group through the Noises Islands Family Trust. The Auckland Botanical Society had day trips there in 1993 and 1998, the latter culminating in the publication by Ewen Cameron of what we regard as the definitive account of the flora of these islands (Cameron 1998). No new additions were made to this species list.

We were transported to the Noises on the Department of Conservation's fast service boat, the "Taikehu", and landed ashore at the biggest island, Otata, using a small Zodiac boat. We also landed on Scott Island and Motuhoropapa Island.

Otata Island

One of the main highlights of this visit was to observe the almost total absence of the all-too-familiar regional environmental weeds, such as boneseed (*Chrysanthemoides monilifera*) and rhamnus (*Rhamnus alaternus*), found on inner Hauraki Gulf islands. Rod Neureuter is to be commended on this tremendous achievement in keeping The Noises in such good condition. It was both refreshing and reassuring to see an Inner Gulf island with a fully functioning ecosystem. Numerous botanists have visited this and other islands in the group and as a result it is a well known fact that island karo (*Pittosporum crassifolium*) have exceptionally large capsules compared with mainland plants (Cameron 1998). Having a tape measure on hand it was interesting to note that seed capsules measured 3 cm in diameter. A large karo within a short distance from the bach measured 38 cm dbh and a height of 16 m. A champion pohutukawa (*Metrosideros excelsa*) – the largest on the island – had obviously escaped the renowned fire in the late 1920's (Cunningham & Moors (1985).

Otata is clothed in short 6-8 m forest dominated by houpara (*Pseudopanax lessonii*), karo and mahoe (*Melicytus ramiflorus*), with plentiful kawakawa (*Macropiper excelsum*), coastal karamu (*Coprosma macrocarpa* subsp. *minor)*, mapou (*Myrsine australis*), whau (*Entelea arborescens*), and hangehange (*Geniostoma ligustrifolium*), plus a scattering of pohutukawa. Rasp fern *Doodia australis* and coastal cutty grass (*Gahnia lacera*) are the predominant ground cover. All these species mentioned would be logical candidates for revegetation projects on inner Gulf islands.

The large-leaved kawakawa appeared to be the intermediate form between the outer island *Macropiper excelsum* subsp. *peltatum* forma *peltatum* and the mainland *Macropiper excelsum* (see also Gardner 1997). It was fairly common and had the same moth-hole infliction as mainland kawakawa. Despite active control of moth plant (*Araujia sericifera*) vines behind the bach in the past, a few seedlings had established and as a result a few of us spent time pulling the offenders up.

Scott Island

Scott Island is situated between Otata to the south-east and Motuhoropapa to the north-west. The island, composed of decaying Waipapa argillites and greywackes is separated from Otata by a narrow stretch of water and an even a smaller island, namely Sunday Island which we could not visit owing to time restrictions and accessibility on this occasion.

Landing by the DoC Zodiac with Rod Neureuter at the helm we only had 40 minutes ashore to botanise so time was of the essence. Luckily we had the advantage of being on the first boat over so were able to start observing and recording thus maximising our short amount of time before going over to Motuhoropapa. This small and fairly steep-sided island also has a raised beach and a 4-5 m high rocky outcrop on the side facing Otata with a far less steep incline, a popular bird-nesting site on the north-eastern corner that was covered in the caryophyllaceous herb *Spergularia media* and the occasional Australasian sand wind grass *Lachnagrostis billardierei.*

After ferrying over the remaining group, Rod set to work on grubbing out the only woody weed species on the island – a small grouping of boxthorn (*Lycium ferocissimum*) growing on the rocky outcrop. His trophies were laid out above the high-tide mark for the warm Indian summer sun to bake dry.

A canopy of low-growing pohutukawa together with coastal karamu, taupata (*Coprosma repens*), mapou, karo and houpara formed a major part of the woody vegetation matrix. The ground cover beneath was mainly extensive fruiting mats of kokihi (*Tetragonia implexicoma*), drifts of that delightful succulent herb *Peperomia urvilleana* and leafy spleenworts. Always a joy to encounter was *Melicytus novae-zelandiae* which occurred just below the 'ridge' on the northern side. Precariously working his way down this northern face to the rocks below and hanging onto the occasional harakeke (*Phormium tenax*) Steve came across 4-5 plants of the Regionally Sparse rauhuia (*Linum monogynum*) with its fine, glaucous/grey leaves. These plants were growing in almost scree-like conditions with full exposure to salt-laden winds.

Fig. 1. View from Otata to Sunday Island, Scott Island and Motuhoropapa Island, with Ike Island to the top right

Fig. 2. Rod Neureuter dealing with boxthorn (*Lycium ferocissimum*) on Scott Island (John Millett)

Fig. 3. Nick Waipara and John Millett on Scott Island

Fig. 4. Steve Benham measuring the giant karo tree on Otata Island

Fig. 5. The red intertidal alga *Liagora harveyana*, on Scott Island

Fig. 6. Forest on Otata

Fig. 7. Wharangi (*Melicope ternata*) on Motuhoropapa (John Millett)

Fig. 8. Abundant kohekohe (*Dysoxylum spectabile*), Motuhoropapa (John Millett)

Species list of vascular plants on Scott Island

Asplenium haurakiense
Asplenium oblongifolium
Astelia banksii
Coprosma macrocarpa subsp. *minor*
Coprosma repens
Dichelachne crinita
Dichondra repens
Disphyma australe
Ficinia nodosa
Geniostoma ligustrifolium
Lachnagrostis billardierei
Linum monogynum
Melicytus novae-zelandiae
Microsorum pustulatum
Muehlenbeckia complexa
Myrsine australis
Peperomia urvilleana
Phormium tenax
Pimelea aff. *urvilleana*
Pittosporum crassifolium
Pseudopanax lessonii
Pyrrosia eleagnifolia
Sarcocornia quinqueflora
Spergularia media
Tetragonia implexicoma

Motuhoropapa

Motuhoropapa is the second largest island in the Noises and has a very noticeable closed forest canopy of pohutukawa. Ascending the cliff with help from a rope it was apparent to the group that rengarenga (*Arthropodium cirratum*) was abundant on the island. A second observation was that the forest floor was covered in vast quantities of wharangi (*Melicope ternata*) seedlings under mature trees which appeared to have larger and more leathery leaves than the mainland form.

Natural regeneration of kohekohe (*Dysoxylum spectabile*) in the northern part of the island has produced really dense stands of 3-4 m high saplings. This 'population explosion' is a direct result of total animal pest eradication in 2002. Motuhoropapa and Otata were reinvaded by Norway rats at least six times between 1981 and 2002, so constant vigilance is needed to keep the islands rodent-free.

Occasional tawapou (*Planchonella costata*) seedlings were encountered beside the track that runs along the eastern half of the island. Six rauhuia plants with spent flower heads and several seedlings were recorded on an exposed north-westerly facing cliff.

Some observations on seaweeds

Mike Wilcox and Peter Hutton checked out the intertidal algae on Otata and Scott Islands. There was a low spring tide in the afternoon and the sea was clear, so conditions were ideal to inspect several sites. The intertidal greywacke rocks on the more sheltered aspects were surprisingly bare. The dominant upper shore alga on open rock was *Apophlaea sinclairii*, with *Capreolia implexa* in patches with more shade and shelter. *Hormosira banksii* was sparse, but the green alga *Derbesia novae-zelandiae* was noticeably common in pools. *Corallina officinalis* was common, and so too was *Liagora harveyana*, especially in the shallows on the south-eastern side of Scott Island. In places there was a low-tide turf of *Pterocladiella capillacea*, and patches of *Caulacanthus ustulatus*. The brown alga *Cystophora torulosa* was prominent on the more sheltered sites. Peter dived down off Scott Island and was rewarded with a sample of *Xiphophora chondrophylla* on which was growing the epiphyte, *Pleurostichidium falkenbergii*.

The sub-littoral fringe on the exposed northern shore of Otata was dominated by a curtain of *Carpophyllum maschalocarpum*, and above it, *Xiphophora chondrophylla*. There was an abundance of agar weed (*Pterocladia lucida*) forming a zone just below the *Carpophyllum*, accompanied sparsely by *Glossophora kunthii*. Few algae grew in the mid intertidal zone, two species observed being *Gelidium caulacantheum* and *Laurencia thyrsifera*.

Acknowledgements
Out sincere thanks to Rod Neureuter for accompanying us to the Noises and for his skill in ferrying the group on the Zodiac from island to island.

References

Cameron, E.K. 1998: Bot Soc trips to The Noises (Hauraki Gulf) and an updated species list. *Auckland Botanical Society Journal 53*: 25-35.
Cunningham, D. M.; Moors, P. J. 1985: The birds of the Noises Islands, Hauraki Gulf. *Notornis 32*: 221-243.
Gardner, R. O. 1997 *Macropiper* (Piperaceae) in the south-west Pacific. *New Zealand Journal of Botany* 35: 293–307
Stanley, R.; de Lange, P.; Cameron, E.K. 2005: Auckland threatened and uncommon vascular plants list. *Auckland Botanical Society Journal 60*: 152-157.