WOODY ADVENTIVES IN NYDIA BAY

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Much of the land around Nydia Bay has been modified to a greater or lesser extent. As one enters the Bay from Pelorus Sound this is obvious well before setting foot on shore, the most conspicuous being the plantations of *Pinus radiata* and alongside them regenerating areas with scattered pine trees, these being at least in part spontaneous. Other conifers are present as shelter belts around old homesteads, the main species being the two cypresses, *Cupressus macrocarpa*, macrocarpa, and *Chamaecyparis lawsoniana*, Lawson's cypress. However, there has been little regeneration of these two species.

The disturbed areas around the old homesteads and along the main track around the shores of Nydia Bay have many adventive species which are to be expected because they grow commonly in Marlborough and Nelson. Most of these are widespread herbaceous weeds and include many grasses, sedges, and legumes. In the last family the main noxious species is the expected *Ulex europaeus*, gorse, all too abundant in lower parts of the bay. Once I even saw it acting as host to the mistletoe, *Korthalsella lindsayi*.

Gorse, like the other species forming the subject of these notes, is a deliberately introduced woody plant, but has presumably been in the Sounds for a longer time than most other plants dealt with here. Certain species which are commonly to abundantly naturalised elsewhere are present in old Nydia Bay gardens but not yet escaped or are only just becoming adventive. One is the well-known *Buddleia davidii* which is certainly well naturalised in the Marlborough Sounds as a whole. Another is *Elaeagnus* x *reflexa* which causes concern in parts of the North Island. I found no seedlings but it is not a plant one would want to have near indigenous forest remnants. Much more disturbing was the discovery of a seeding bush of *Hakea salicifolia*, willow-leaved hakea, beside the main track on the edge of a pine plantation. Many seedlings grew nearby. In the same area was *Cotoneaster glaucophyllus*, another as yet minor, garden escape. One tree must have been nearing 10 m high, the largest I have ever seen of this species, so much a problem in the North Island.

Adventive lianes are always a worry when near indigenous forest, so naturally the sight of two or three small patches of *Clematis vitalba*, old man's beard, was unwelcome. Efforts were made to eradicate them but probably unsuccessfully. On the other hand, the single plant of *Actinidia deliciosa*, kiwi fruit, in kanuka scrub close to Nydia Lodge, was hopefully destroyed. It seems from recent Bay of Plenty reports that kiwi fruit is not as benign as I had thought. I also pulled out the few seedlings of *Lonicera japonica*, Japanese honeysuckle, found near the track in the Nydia Bay wharf area, but had to leave the mature specimens around the old garden nearby. *Akebia quinata* grew in an old garden and may increase vegetatively, but would be unlikely to form its fleshy sausage-shaped, purplish fruits. As expected, *Hedera helix*, ivy, was seen in this habitat but was scarcely more than a relic of cultivation. Fortunately, we saw hardly any banana passionfruit in Nydia Bay, although *Passiflora mollissima* is common not far away towards the head of Pelorus Sound.

A few other sightings are worthy of mention in detail. A small number of *Hypericum androsaemum*, tutsan, bushes (mainly very young) were seen and eradicated, all near where the track to Nydia Saddle leaves Nydia Bay. Although not the worst of weeds this fleshy-fruited, small shrub is one which the area can well do without. A much larger fleshy-fruited shrub or small tree is *Dendrobenthamia capitata*, Himalayan dogwood, now adventive in the S.E. corner of Nydia Bay. In January its spectacular creamy-yellow bracts are visible from afar on the forest margin. It also grows as a relic of cultivation in a nearby garden. A similar situation applies to *Prunus laurocerasus*, cherry laurel, of which a single spontaneous plant was seen. Likewise *Euonymus europaeus*, spindle tree, is still very uncommon, as is *Berberis glaucocarpa*, barberry, the latter a nasty weed in the Sounds generally. However, the species which seemed to attract the attention of DoC most was *Ilex aquifolium*, holly, for in the S.E. corner of Nydia Bay a number of what had been large suckering thickets had been cut nearly to ground level. Although holly berries had been presumably produced in abundance there was almost no sign of spontaneous plants. As expected, holly persists as a relic of cultivation in old gardens in the Bay. The only other adventive woody plants noted were: *Erica lusitanica*, Spanish heath, abundant on open places; *Ficus carica*, fig; *Rosa rubiginosa*, sweet briar; *Rubus fruticosus* agg. blackberry; *Sambucus nigra*, elderberry; *Fraxinus* sp. (unnamed saplings); and the legumes *Acacia dealbata*, silver wattle; *Chamaecytisus palmensis*, tagasaste or tree lucerne; *Robinia pseudacacia*, false acacia; and a non-flowering plant which was probably *Teline*

monspessulana, Montpellier broom. All these legumes were uncommon or rare, unlike the already-mentioned gorse.

It is obvious from these notes that, apart from the legumes, most of the woody plants mentioned above as constituting possible threats to indigenous ecosystems have fleshy bird-dispersed fruits. Some of them are shade-intolerant and would therefore only be likely to cause problems in scrub and regenerating, fairly open, low forest. Others such as *Hypericum androsaemum, Prunus laurocerasus*, and *Sambucus nigra* are reasonably shade-tolerant and like lianes can germinate and grow nearly to maturity under a tree canopy. The legumes have very hard seeds which can be explosively dispersed and then moved further by gravity, water, or by animals such as rodents and birds. It is well-known that leguminous seeds can pass through alimentary systems of animals unharmed. Finally, a few species mentioned have wind dispersed seeds, either because of their smallness, e.g., *Buddleia davidii* and *Erica lusitanica*, or by an appendage on their seeds or fruits, *Clematis vitalba, Hakea salicifolia*, and the unnamed *Fraxinus* species.

NOTE: *HYPOXIS HOOKERI* (HYPOXIDACEAE) ON OTAMAHUA (QUAIL ISLAND)

On 30 March 1999 I found *Hypoxis* in considerable numbers in soil-filled depressions on the small basaltic outcrops on the island's summit plateau. The clusters of small, bright green, linear leaves of this little monocotyledon would have been hard to detect if it had not been flowering. "Little yellow star" would be a good common name for it. It is a winter geophyte, dying down to an underground corm in summer (Moore, L.B., Edgar, E. 1970, *Flora of NZ Vol 2*, give its flowering and fruiting period as February – November). There seems to be no compelling reason for believing that *Hypoxis* is not indigenous to New Zealand (as well as to Australia). This was the conclusion of Brian Molloy and John Thompson, also (C.B.S.J. 15, p. 14-15, 1981).

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