Errata and addenda

My article 'On distant shores: New Zealand's natives as weeds abroad' (New Zealand Garden Journal, 2014, Vol. 17, No. 1, pp. 10–24) generated much interest and feedback.

A slightly abridged version was published in the New Zealand Botanical Society Newsletter (September 2014, No. 117, pp. 11-22), and the Weekend Gardener magazine has adapted the content for a quarterly special edition on weeds (December 2014).

In the original New Zealand Garden Journal version (p. 13, Fig. 8 caption and p. 23, Acknowledgements) the surname for photo contributor Leon Perrie was misspelled as 'Perry'. I apologise to Leon for this error.

Several botanists provided further corrections and observations of New Zealand native plants in other countries:

Bryony MacMillan questioned the presence of Acaena novae-zelandiae on Hawai'i (stated on p. 11 of my article). A Wikipedia page (http://en.wikipedia.org/wiki/Acaena novae-zelandiae; accessed June 2014) seemed to indicate that this species may be on Hawai'i. I contacted Hawaiian weed experts Forest Starr and Kim Starr and they confirmed that A. novae-zelandiae is not known to be present on that island archipelago. The sole native species, Acaena exigua, is now presumed extinct in Hawai'i.

When writing my article, I was mindful that New Zealand native Cardamine have weedy tendencies and (like Epilobium, the creeping willow-herbs) are contaminants of potted plants and the nursery industry. Sure enough, there are records of the New Zealand endemic Cardamine corymbosa (New Zealand bittercress) as a nursery weed in North America, Europe and elsewhere. Phil Garnock-Jones informed me that he wrote an article entitled 'New Zealand bitter-cress. Cardamine corymbosa' for the BSBI News (September 1993, No. 64, p. 16) and there are other references to this species in the BSBI archive (the newsletter of the Botanical Society of Britain and Ireland; http://archive.bsbi.org.uk/). Phil also mentioned to me that there are some New Zealand hebes sparingly naturalised (Veronica speciosa in Hawai'i; V. elliptica, V. salicifolia and V. speciosa in Flora Europaea).

Rhys Gardner wrote to me questioning a record I found referring to feral pigs eating and dispersing karaka (Corynocarpus laevigatus) seed. Rhys asked if pigs are immune to the neurotoxin present in the fresh seed kernels. According to an Invasive Species Compendium factsheet (www.cabi.org/isc/datasheet/59069) "Mammals which ingest karaka are cattle, pigs, and deer (Motooka et al., 2003; Mitcalfe, 2004; Klinac, 2007). These appear to cause no adverse effects, so dispersal by these agents is possible, although karaka kernels probably do not survive passage through a mammalian digestive tract." Rhys also recalled that the New flora of the British Isles (2nd ed. by Clive Stace) referred to the Australian and New Zealand indigenous fern Phymatosorus diversifolius (now known as Microsorum pustulatum) as being naturalised "on shady walls and damp places in wood" in the SW of Ireland (County Kerry) and on the Scilly and Guernsey Isles.

In my article, I wrote that Hydrocotyle moschata (the hairy pennywort) is an uncommon weed in the south coast of California. In 1990 (Watsonia 18, p. 93-94), Colin Webb documented three New Zealand hydrocotyles that have naturalised in the UK: Hydrocotyle moschata, H. moschata 'small-leaved variant', and H. novae-zeelandiae var. montana.

Bill Sykes alerted me to an article that he wrote in the Gardeners Chronicle Gardening Illustrated (7 & 14 October, 1961) on 'Observations on plants at Tresco', of the Scilly Isles west of Land's End, Cornwall. In the second part of his article (p. 299), Bill wrote that Muehlenbeckia compexa and Phormium tenax had both naturalised at Tresco, which adds to the locations that I referred to for these species.

Peter de Lange emailed me notes on New Zealand species that he observed naturalised in Europe during his stay centred Sardinia (Sardegna) in 2013.

He observed two New Zealand endemic creeping willow-herbs: Epilobium melanocaulon wild in a riverbed at Mayrhofen, Austria, and E. nummularifolium naturalised in Alghero, Sardinia. He observed that the New Zealand endemic Pittosporum crassifolium is also wild around Porto Conte and in Alghero, Sardinia, where it and the East Asian species *P. tobira* are now a common part of the local coastal scrub.

Peter comments that Cordyline australis is also naturalising around Sardinia, where it's commonly cultivated (Fig. 1) and now spreading in places like Alghero (Fig. 2) and along the Cala Gonone coast.

In my article I stated that *Tetragonia tetragonioides* (New Zealand spinach) was naturalised in many parts of the world. Peter de Lange commonly saw it in the Mediterranean region including many beaches in Sardinia (Fig. 3).

Peter makes some interesting observations of ngaio (Myoporum). He saw New Zealand ngaio (M. laetum) in Spain, Italy and Sardinia but he considers that most specimens he found wild there are of the mainland Victorian race of Australian M. insulare, and hybrids with it and M. laetum. According to Peter, such hybrids probably also include Californian and Hawaiian records of Myoporum. Similarly, Peter de Lange comments that in Australia, M. laetum is naturalised in Tasmania and Victoria (at Apollo Bay), with hybrid swarms there involving the native M. insulare.

In Sardinia Peter de Lange also observed Coprosma repens and Metrosideros excelsa (Fig. 4) naturalising. He found Metrosideros kermadecensis growing but not (yet) spreading. Peter found karaka naturalising in the Mediterranean area of Nice in France, and becoming troublesome there.

Peter has also observed whau (Entelea arborescens) naturalising in the grounds of Melbourne Zoo, Victoria, when he visited in July 2011.

During the writing of my article, I remained aware that research on this subject is rather open-ended. Weed distribution records, including those derived from our native species overseas, are seldom (if ever) complete. I only considered vascular (so-called 'higher') plants, and because of the degree of overlapping information, chose to compile a relatively modest reference and website list. My thanks to the correspondents named above for contributing their additional knowledge of our natives as weeds on distant shores.

Murray Dawson



Fig. 1 Cordyline australis (cabbage tree, tī kōuka) cultivated at Via Ales, Alghero, Sardinia. Photo: Peter de Lange.



Fig. 2 Cordyline australis seedling at Via Tarragona, Alghero, Sardinia. Photo: Peter de Lange.



Fig. 3 Seedlings of Tetragonia tetragonoides (kōkihi, New Zealand spinach) establishing on the beach at Cala Gonone, Sardinia. Photo: Peter de Lange.



Fig. 4 Metrosideros excelsa (pōhutukawa) growing as a wild tree in derelict or rough pasture in Alghero, Sardinia. Photo: Peter de Lange.