

## Lottin Point weeping kānuka

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In October 2016, during a visit to the East Cape region, Nick and I decided to make a short detour to Lottin Point. One objective was to try to locate the special kānuka reported from the area, to see whether it was still present.

In his comprehensive revision of kānuka (de Lange 2014), Peter de Lange included a short section (*see below*) on this group of plants that he had visited in November 2000, when he saw “20 *Kunzea* with a distinctive, multi-trunked, pendulous branched habit forming shrubs up to 2-3 x 3 (-6) m.” Later, Mike Thorson, a DOC botanist based at Gisborne at that time, reported to Peter that by 2004 the site had been partially cleared by the landowner and three specimens remained. This was an example of how quickly vegetation components can change.

Peter was interested in whether the distinctive, weeping form was different enough from *Kunzea robusta*, the most common and widespread species in the North Island, to be worthy of a separate taxonomic status. The plants have leaves most similar to *K. robusta*, but Peter considered that the leaf hairs could indicate some relationship with *K. amathicola*, the kānuka of west coast sand dunes. De Lange et al.’s (2010) study of two nuclear DNA regions was inconclusive and de Lange (2014) acknowledged this by not recognising the Lottin Point kānuka as a formal entity but rather discussing it under a section entitled *Incertae sedis* (Latin for “of uncertain placement”).

Peter reported that “by 2010 all known plants of the Lottin Point kānuka had been destroyed by land development” and that no further plants were located in a brief search in 2013. Informal reports of their presence persisted, so the challenge was tantalising!

We had gathered the best information we could, and were rewarded by finding, amongst upright *Kunzea robusta* and mānuka, two adjacent, mounded kānuka shrubs with strongly weeping branches. One plant was estimated at 5 m high – surely too high and substantial to have grown since 2013 – and the second plant was approximately 2 m high. They were below the road in sloping grassland, with sedges and shrubby weeds amongst the mānuka and kānuka. More recent analyses of about 500 nuclear DNA genes indicate that they are most closely allied to *Kunzea robusta* (Matt Buys, pers. comm.) There are many groups of plants in which weeping forms

have developed as variants or ‘sports’, and these have often been cultivated for use in horticulture. There are informal reports of kānuka of somewhat weeping form, (there is a very large tree near the bridge across the Motu River on State Highway 35), but less pronounced than the examples near Lottin Point Road. Descriptions often mention ‘variable form’, and in his *Kunzea* revision (de Lange 2014), Peter describes *Kunzea robusta* form as “trees (8-)20-25(-30) m tall, rarely decumbent shrubs up to 1 x 3 m”, so the potential for less upright form is accepted. These examples are certainly a variation on the typical upright growth of this species, which is evident in the shrubby, regenerating vegetation surrounding the two weeping trees. *Kunzea toelkenii*, the twisted-stem kānuka described from the Bay of Plenty coast, although windswept, has also been described as possessing pendulous (weeping?) branches, indicating that the potential for this form is of wider occurrence in the genus.

Peter had not seen fertile material on his earlier visits, but we were fortunate to find some old seed capsules, low down near the ends of some weeping branches, that were reminiscent of *K. robusta*. Unfortunately we were a bit early in the season to see flowers.

There is now at least one recent observation on Inaturalist (formerly NatureWatch NZ, [http://inaturalist.nz/observations?taxon\\_id=411247](http://inaturalist.nz/observations?taxon_id=411247) ) so the plants are still on the hillside. Keep a lookout along Lottin Point Road, above the bay, if you are out that way.

#### References

- De Lange P.J. 2014. A revision of the New Zealand *Kunzea ericoides* (Myrtaceae) complex. *PhytoKeys* 40: 1–185. doi: [10.3897/phytokeys.40.7973](https://doi.org/10.3897/phytokeys.40.7973)
- De Lange P, Smissen R, Wagstaff S, Keeling D, Murray B, Toelken H. 2010. A molecular phylogeny and infrageneric classification for *Kunzea* (Myrtaceae) inferred from rDNA ITS and ETS sequences. *Australian Systematic Botany* 23: 309–319.



Weeping kānuka framed by upright *Kunzea robusta*, near Lottin Point. *Photo: Nick Miller*



Weeping kānuka near Lottin Point, *Photos: Nick Miller*