up to the summit and was very pleased to encounter there saddleback, whitehead and tomtit.

On our return to the Rangitoto Wharf, Val Smith had on display her just-published book, "*Common Ground: who's who in New Zealand botanical names*". It is a magnificent production of 304 pages telling the stories of 250 people commemorated in New Zealand botanical names. We had an informal book launch at the DOC information shelter. Just to mention a few names in it in connection with plants we saw during the day: Avicenna, Joseph Banks, Rembert Dodoens, Francesco Griselini, Thomas Kirk, Thomas Andrew Knight, and Andrew Sinclair.

# Trip report: Summit track, The Dome Forest Conservation Area, Warkworth, 19 September 2015



Fig. 1. We stopped often for interesting plants on the ascent. Photo: J. Salter. All photos taken on 19 Sep 2015.



Fig. 2. The steep stairs approaching the Lookout. Photo: J. Salter.

### **Maureen Young**

**Participants:** Chris Ashton, Bruce Calvert, Ewen Cameron, Lisa Clapperton, Frances Duff, Leslie Haines, Peter Hutton, John Lambert, Anna and Richard Mairs, Christine Major, John Millett, Philip Moll, Vivienne Paterson, Colleen Pilcher, Helen Preston Jones, Joshua Salter, Gabi Schmidt-Adams, Theng Seth (from Cambodia), Vijay Soma, Maureen Young (leader).

The Dome is the flat-topped hill (336 m) that defines the skyline to the north west of Warkworth. On checking a local history book at the Warkworth Museum I found that the Maori name is Tohitohi-o-rei, (which *may* refer to the cutting of the umbilical cord of Rei) (Mabbett 1977: p. 287) but this name is



**Fig. 3.** Large northern rata carrying a load of hangers-on. Photo: J Salter.



Fig. 4. View south-east from the Lookout, towards Warworth and the Hauraki Gulf. Photo: J. Salter.



**Fig. 5.** Mature *Raukaua edgerleyi* in the canopy (centre), visible from the Lookout. Photo: J. Salter.



**Fig. 6.** Mature leaves of *R. edgerleyi* are glossy with wavy margins. Photo: J. Salter.



Fig. 7. The Dome (at left) has a flat top; visible from the Lookout, if you lean out far enough. Photo: J. Salter.

not shown on maps or used by locals. I could find no reference to how the Dome came by its English name; however, my late partner, Frank Hudson, claimed that it was named by his grandfather, Josiah Hill Hudson. Jos was a cultured English gentleman who settled in the district in the early 1860s and named two hills, the Dome and the Dark Summit. The name, Dark Summit, has never been used officially, but older locals, when asked, will point to a bush-clad peak in the west. The Dome range of hills was a great impediment to road building in horseand-cart days as it took a deal of exploration to find a suitable pass. The Dome Forest Conservation Area of 402.8 ha was known as the Dome State Forest until the Conservation Act of 1987.

The track to the summit and beyond to a kauri grove was opened in the 1970s. The first part of the track follows a paper road that passes through private property before reaching the Conservation Area. This part is metalled and stepped (Figs. 1, 2) until it reaches a wooden lookout, but from there it is only of tramping standard. The track has now been extended to join up with the Te Araroa Walkway, and with the increase in foot traffic it was very muddy on the day of the field trip. We were all suitably shod so it did not spoil the day.

The second-growth bush on the lower slopes has a canopy of tall kanuka (Kunzea robusta) over mapou (*Myrsine australis*), five finger (Pseudopanax arboreus) and ponga (Cyathea dealbata). Escapees from the garden of the Top O' the Dome Cafe, such as agapanthus (A. praecox subsp. orientalis) and Cotoneaster glaucophyllus and weeds including the Australian grass, Entolasia marginata, grew among trackside vegetation for a short distance, but once these had faded out the only weed of note was some Sellaginella kraussiana up near the summit. We very quickly came across a patch of the greenhood orchid, Pterostylis graminea in early flower, and saw several more plots in this favoured habitat. There were several ground orchids in this area - P. banksii, again in early flower, P. alobula in late flower, Nematoceras macranthum in bud,



Fig. 8. Lunch at the Dome summit. Photo: E. Cameron.

*N. trilobum* spreading vegetatively and with only a few capsules showing, and *Acianthus sinclairii* which had finished flowering. Three species of cabbage tree grow together in one spot, (*Cordyline australis, C. banksii* and *C. pumilio*). The latter was quite common for some time along the track edge. The herb, *Veronica plebeia* was a new addition to the species list.

An outcrop of Waitemata sandstone supports Hebe Earina autumnalis, terrestrial stricta. Astelia (Collospermum) hastata and another terrestrial astelia that had been wrongly diagnosed as A. banksii but turned out to be A. solandri. Soon the second growth bush was replaced by mature forest with many large rimu (Dacrydium cupressinum) and rata (Metrosideros robusta) trees (Fig. 3). A couple of big kawaka trees (Libocedrus plumosa) grow near the track and it was pleasing to see several saplings establishing in the undergrowth. Indeed, the regeneration here was commented on, and although DOC has not employed contractors to control goats, it looks as if the recreational hunters are doing good work. Quintinia serrata was first sighted nearby and Melicytus macrophyllus was common in the understorey.

Approaching the lookout, large brooms (Carmichaelia australis) grow, as do two species of libertia (L. grandiflora and L. ixioides); without flowers or fruit it is difficult to distinguish the difference, but a fruiting plant beside the lookout proved to be L. ixioides. From the lookout, with a view over Sheepworld and beyond to Warkworth and the Mahurangi Heads (Fig. 4), we could see several hinau (Elaeocarpus dentatus), a large old mangeao (Litsea calicaris) and the head of a Raukaua edgerleyi with the wavy-edged leaves just discernible (Figs. 5, 6), as well as the flat-topped Dome itself (Fig. 7). At this point the target of reaching the kauri grove for lunch was clearly not going to be possible, so it was decided that the lunch stop would be on the summit. People took their own pace to cover the ground as they climbed and it was generally agreed that there was plenty of interesting botany along the way. After negotiating a rocky bluff or two, the summit, with its old trig station, was achieved, and lunches produced (Fig. 8), except for John Lambert's – he had foolishly given his lunch to "tail-end-Charlie" Vijay to carry, and had to wait some time for it to arrive.

After lunch some chose to carry on to the kauri grove and others retraced their steps. While still on the flat summit the former were shown some plants of *Raukaua edgerleyi*, as usual starting life as epiphytes on the trunks of tree ferns (Figs, 9, 10). The track dropped quite suddenly then kept along a ridge towards the promised grove. The rata trees here are even larger and grander than those seen earlier. The Te Araroa Walkway skirts the grove, but we ignored the signs and carried straight on and very soon came to the magnificent group of beautiful big trees. Not a single kauri had been seen along the track until this point, which made these trees even more surprising.

The greenhood orchid that is "hooked on kauri", *Pterostylis agathicola*, appeared right on cue. A large *Dracophyllum latifolium* grows among the huge trunks. After much admiration and photography, a diameter tape was produced to



**Fig. 9.** Roots of a large *Raukaua edgerleyi* that germinated approx. 3 m up a treefern trunk (top of image). Photo: J. Salter.



**Fig. 10.** One mature leaf and three trifoliate juvenile leaves, on a sprout from the trunk of the *R. edgerleyi* tree in Fig. 9. Photo: J. Salter.



**Fig. 11**. Fallen kauri still going strong, held clear of the ground by its crown lodged in another tree. Photo: J. Salter.



Fig. 12. Maureen with the diameter tape. Photo: C. Pilcher.

measure the trunk of a tree that had fallen almost horizontally, but, with half the roots still in the ground, had kept on growing (Figs. 11, 12). The DBH (diameter at breast height) proved to be a respectable 1.2 m. The diameter tape caused much discussion and head scratching, but finally all were convinced that it did indeed do the job. From there on it was just a case of returning to the car park. The forecasting of a wet day did not hold true, as a shower before we started, and another as we drove away were all that occurred.

### Acknowledgements

My thanks to Bot Soc member, David Wilson, DOC Warkworth, for information on the status of the reserve and track, and to the Archives of the Warkworth & Districts Museum for access to local history books.

#### Reference

Mabbett, H. 1977: The Rock and the Sky, the Story of Rodney County. Wilson & Horton Ltd. Auckland, New Zealand.

**Appendix.** Species list for the Dome Track to the summit and the kauri grove, observed on 19 Sep 2015. This list is part of an earlier list compiled by Maureen Young (1999-2015) for the entire Dome Forest.

Lycophytes	
Lycopodium volubile	
Phlegmariurus varius	
Sellaginella kraussiana *	ABS
Ferns	
Adiantum cunninghamii	
Adiantum fulvum	
Adiantum viridescens	
Asplenium bulbiferum	
Asplenium flaccidum	
Asplenium oblongifolium	
Asplenium polyodon	
Blechnum discolor	
Blechnum filiforme	
Blechnum fraseri	

Blechnum novae-zelandiae Cardiomanes reniforme Cyathea dealbata Cyathea medullaris Cyathea smithii Dicksonia squarrosa Hymenophyllum demissum Hymenophyllum demissum Hymenophyllum revolutum Hymenophyllum revolutum Lastreopsis hispida Loxogramme dictyopteris Loxogramme dictyopteris Logodium articulatum Microsorum pustulatum

Paesia scaberula Pneumatopteris pennigera Pteridium esculentum Pyrrosia eleagnifolia Sticherus cunninghamii Tmesipteris elongata Tmesipteris tannensis

#### **Gymnosperms**

Agathis australis Dacrycarpus dacrydioides Dacrydium cupressinum Libocedrus plumosa Podocarpus laetus Podocarpus totara Prumnopitys ferruginea

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Dicotyledons		Lotus pedunculatus *	ABS	Astelia trinervia	
Alectryon excelsus	ABS	Melicytus macrophyllus		Carex banksiana (Uncinia)	
Alseuosmia macrophylla		Melicytus ramiflorus		Carex uncinata (Uncinia)	
Beilschmiedia tarairi		Metrosideros fulgens		Cordyline australis	
Beilschmiedia tawa		Metrosideros perforata		Cordyline banksii	
Brachyglottis repanda		Metrosideros robusta		Cordyline pumilio	
Callitriche stagnalis *	ABS	Mida salicifolia		Cortaderia selloana *	ABS
Carmichaelia australis		Myrsine australis		Dendrobium cunninghamii	
Carpodetus serratus		Myrsine salicina		Dianella nigra	
Centaurium erythraea *	ABS	Nertera depressa		Farina autumnalis	
Centella uniflora		Nertera dichondrifolia		Earina mucronata	
Clematis cunninghamii		Nestegis lanceolata		Entolacia marginata *	ADC
Clematis paniculata		Olearia furfuracea		Environasia marginata	ADJ
Coprosma arborea		Olearia rani			
Coprosma grandifolia		Passiflora sp.*	ABS		
Coprosma lucida		Piper excelsum		Gannia paucifiora	
Coprosma rhamnoides		Pittosporum cornifolium		Gahnia setifolia	
Coprosma robusta		Pittosporum tenuifolium		Gahnia xanthocarpa	
Corynocarpus laevigatus		Prunella vulgaris *	ABS	Hedychium gardnerianum *	ABS
Cotoneaster glaucophyllus *	ABS	Pseudopanax arboreus		Isolepis reticularis	
Dodonaea viscosa		Pseudopanax crassifolius		Libertia grandiflora	
Dracophyllum latifolium		Quintinia serrata		Libertia ixioides	
Dysoxylum spectabile		Ranunculus reflexus		Microlaena avenacea	
Elaeocarpus dentatus		Raukaua edgerleyi		Microlaeana stipoides	
Euchiton japonicus		Rhabdothamnus solandri		Microtis unifolia	
Galium propinquum		Rubus australis		Nematoceras macranthum	
Geniostoma ligustrifolium		Rubus cissoides		Nematoceras trilobum	
Griselinia lucida		Ulex europaeus *	ABS	Oplismenus hirtellus	
Hebe stricta		Veronica plebeia	ABS	Phormium tenax	
Hedycarya arborea		Vitex lucens		Pterostvlis alobula	
Hoheria populnea		Wahlenbergia violacea		Pterostylis agathicola	
Hypericum pusilla		Monocotyledons		Pterostvlis banksii	
Knightia excelsa		Acianthus sinclairii		Pterostylis graminea	
Kunzea robusta				Phonalostylis sanida	
Leptospermum scoparium		Agapaninus praecox "	ABS	Rhopalostylis sapida	
Leucopogon fasciculatus		Asparagus scandens *	ABS	Ripuyunum scanuens	
Litsea calicaris		Astelia hastata (Collospermum)			
Lobelia anceps		Astelia solandri		i neiymitra iongifolia	

# Additions and corrections to Rangitoto plant list

# **Mike Wilcox and Steve Benham**

Since the publication of "Natural History of Rangitoto Island" in August 2007 (Wilcox 2007) there have been 26 additions or corrections to the higher plants list (\* = exotic). These are as listed here.

## 1. FERNS

SCHIZAEACEAE *Lygodium articulatum* A.Rich. Flax Point on lava rocks in the open, *S.P. Benham*, 21 Aug 2012, AK 333053.