Epiphyte Planting TrialWellington City Council

Aerial Restoration in Action

Anita Benbrook – Restoration Technical Advisor

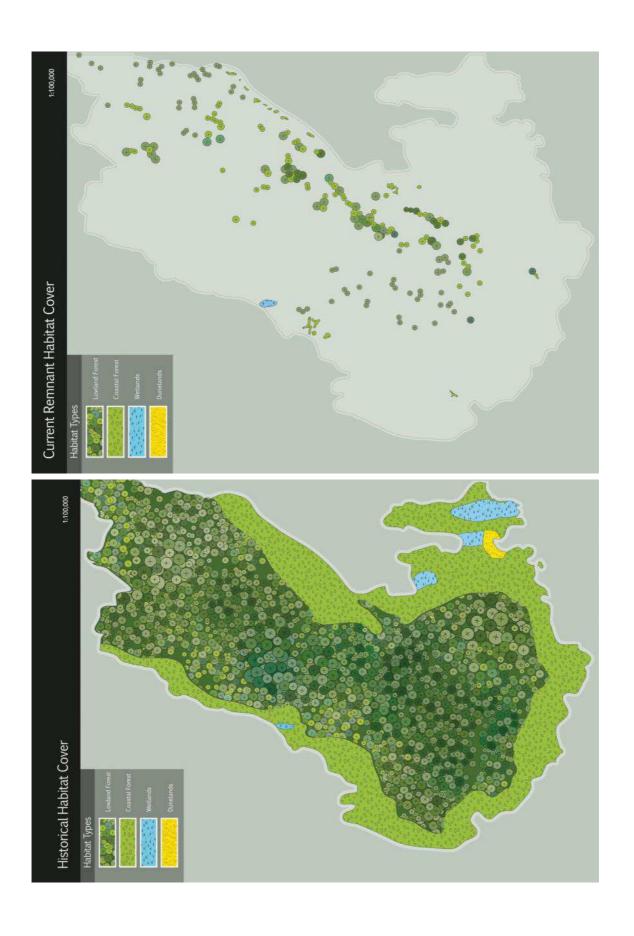
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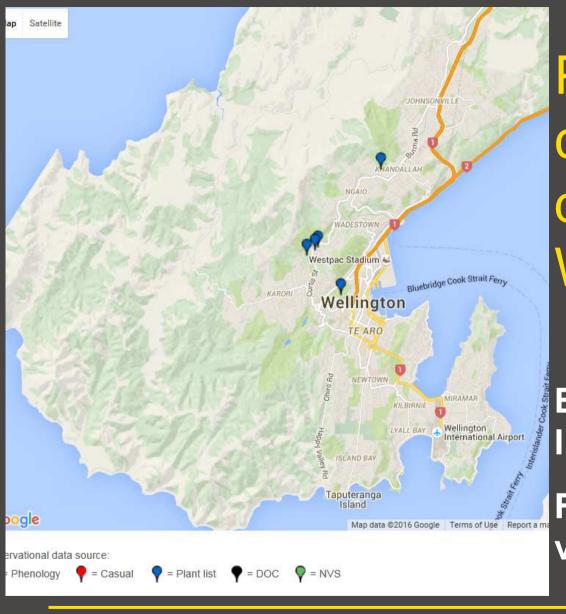
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Trial Planting of two species

- Pittosporum cornifolium
- Reduced in numbers in Wellington City
- Sparse populations in surrounding Forest Parks in wider Wellington Region
- Astelia hastata syn Colleospermum hastatum
- Few epiphytic clumps outside of Otari Wiltons Bush
- Investigating ways of re establishing these species

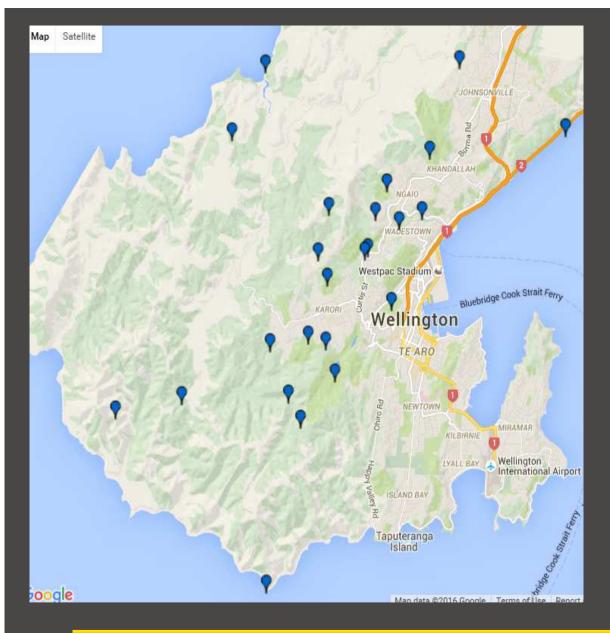




Pittosporum cornifolium distribution Wellington

Based off plant lists, NZPCN site

Few WELT vouchers



Astelia hastata distribution Wellington

Based off plant lists, NZPCN site

Site selection

- Remnant forest area
- Suitable host trees
- Existing clumps of Astelia
- Sites close together for ease of monitoring
- Sites that faced south

Methodology

- Arborists two for safety
- Recorded details from ground
- GPS trees
- Permanent tags for trees,
- Drew pictures of trees, positions planted
- Used bucket to get materials up and down

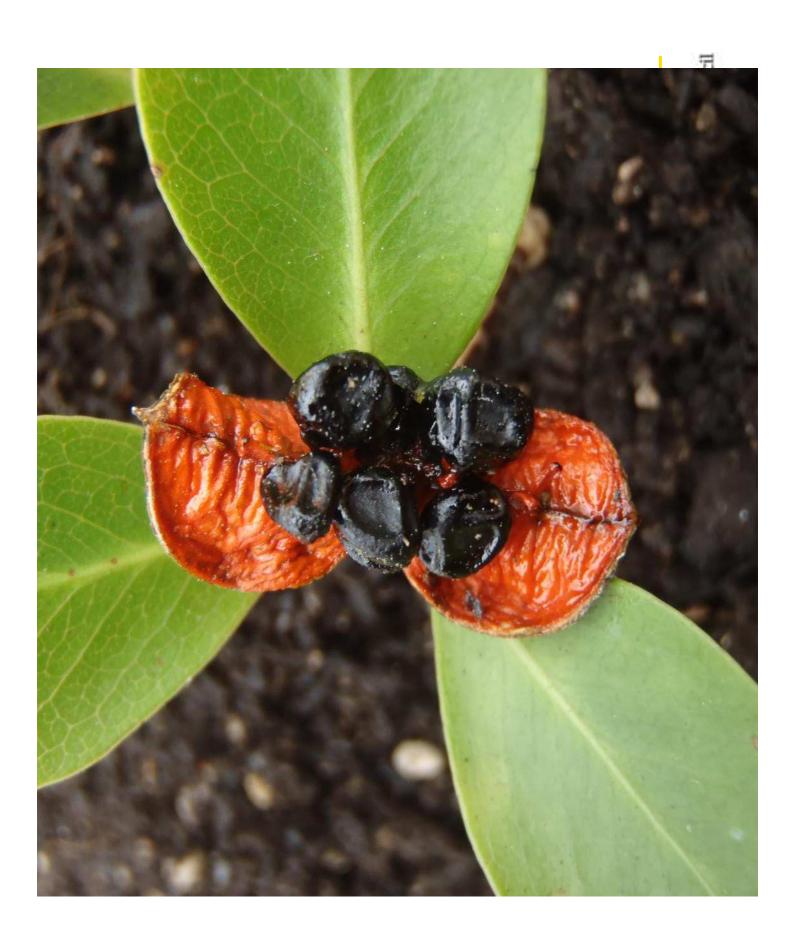


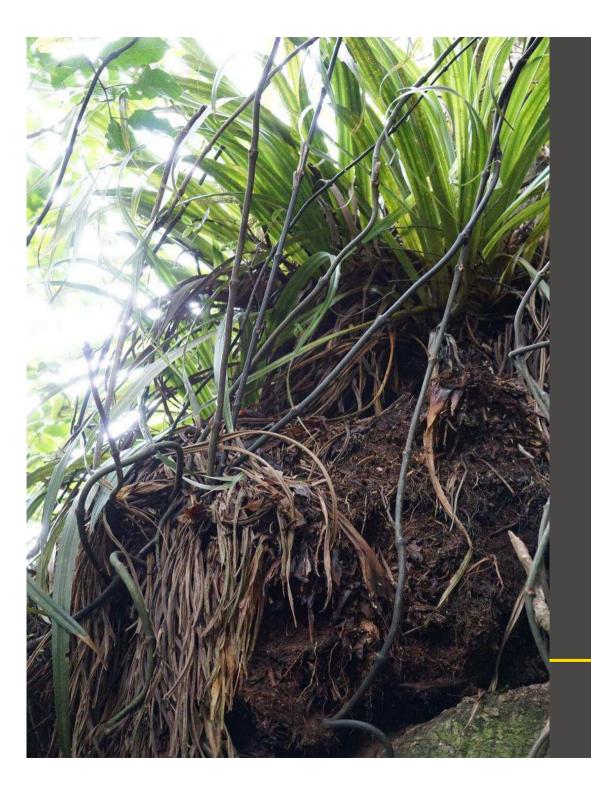
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Pittosporum cornifolium

- Seed collected off several plants in old rimu at Otari – Wilton's Bush
- Seed collected in 2013
- Germinated in 2 months
- Planted out as pb 2

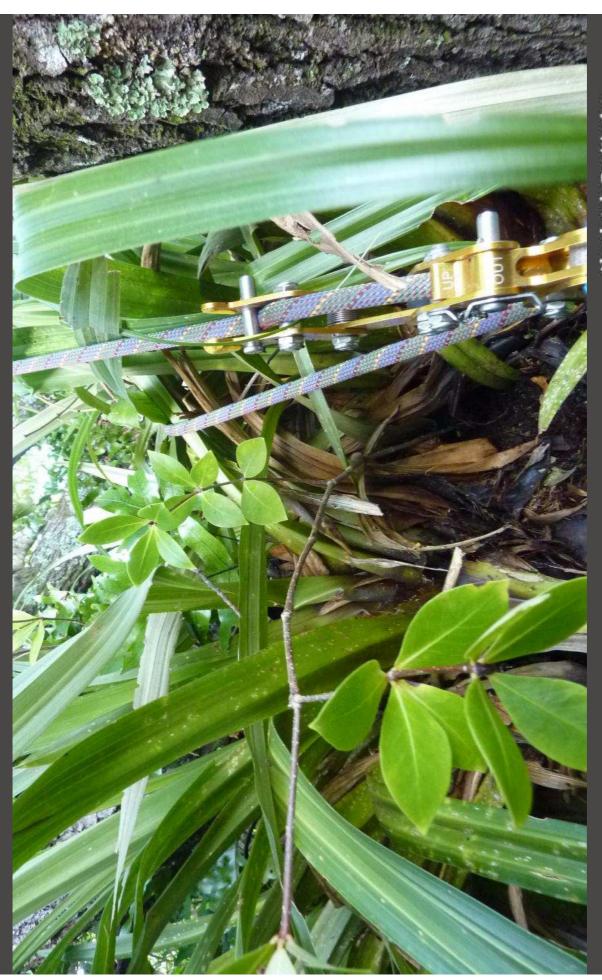




Where to plant

- Dry material at base of the clump
- Inserted within the clump
- North/South facing

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Astelia hastata

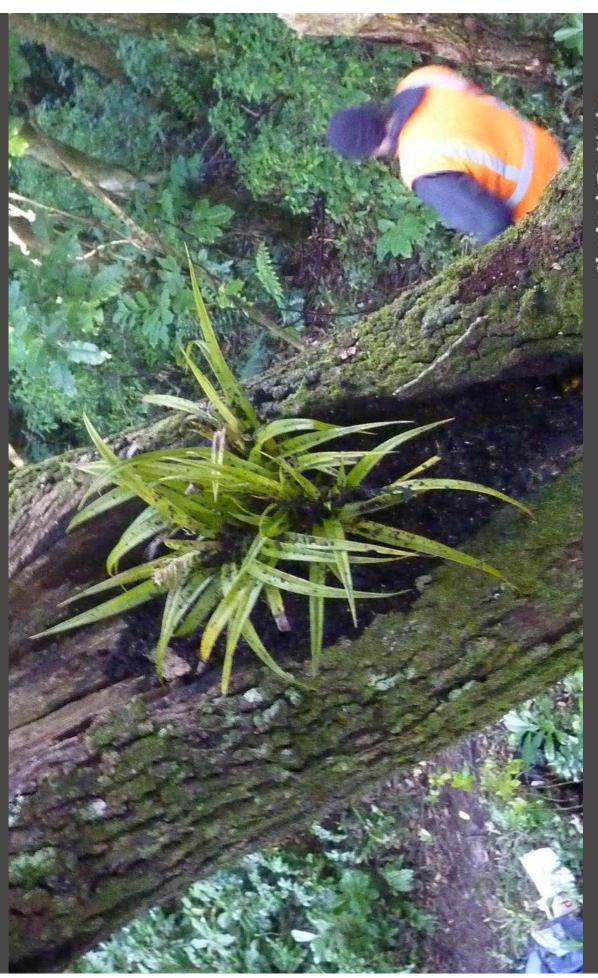
- Grown from seed at Berhampore Nursery
- Took 7 months to germinate, fresh seed
- Taken 6 years to be big enough to plant out
- Planted out as pb 1 1/2
- Planted into rotting stumps, forks, hollows

Planted in fork, used propagation tape to hold them in place



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Results 9 months later

- Planted total of 15 Pittosporum cornifolium and 13 Astelia hastata, 13 July 2015
- Been extremely dry summer
- Expectation was limited success
- Pleasantly surprised when re visited in March

Results 11/4/16

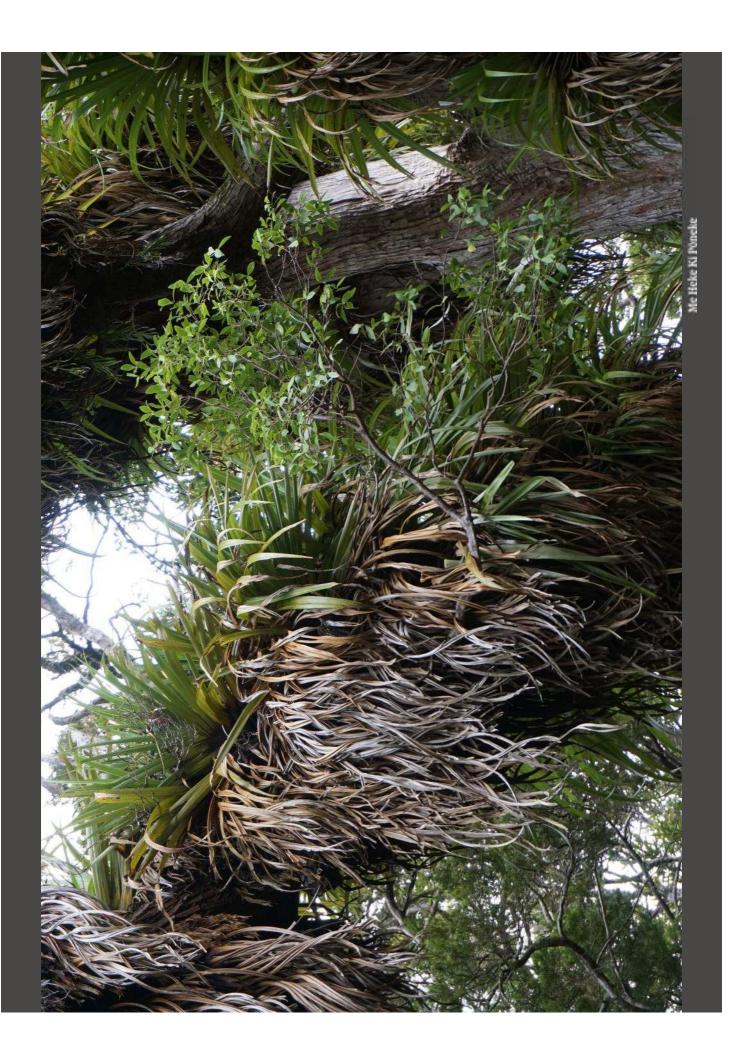
- Survival was very high
- 9 P. cornifoliums growing well in foliage of existing clumps
- Failed in the base of the clumps
- 11 Astelias survived
- Starting to accumulate leaf detritus

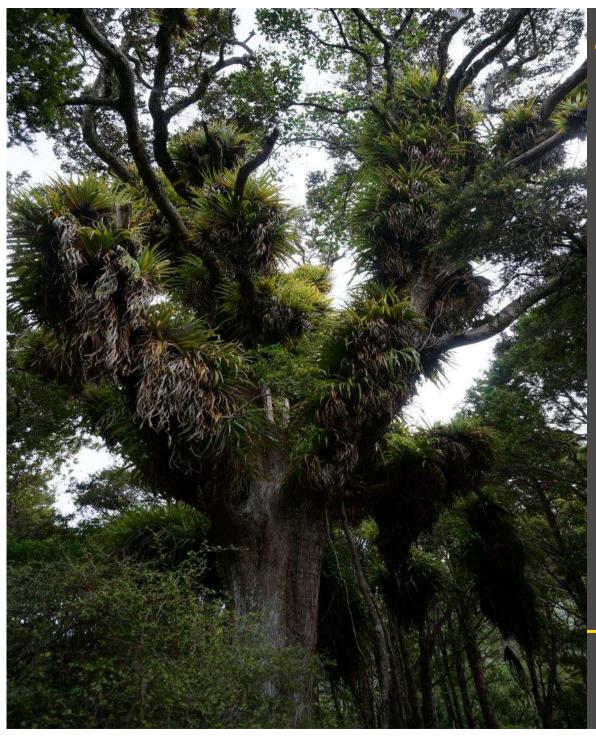




Conclusions

- Place where leaf litter can accumulate
- Where any moisture will run down branches
- Smaller bag size possibly be better, especially for P. cornifoliums, probably tubes
- South facing higher success rate
- Labour intensive
- Still early days





Thanks to;

William Melville

The climbers and planters;

Warren, Josh & Denim

Berhampore Nursery staff - Astelias

Rewi – for growing the P. cornifoliums

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