

STEM Evaluation for:
Dacrydium cupressinum
(Rimu) - Native

Location: Glenn Logie Rose Garden, Anzac Parade.

STEM Score: 162

Assessed by: Marc Higgie, Consultant Arborist, 6 November 2013

History:

None supplied or known at this stage.

Visual Comments:

- Handsome tree on what used to be the Sedgebrook Estate.
- This is a healthy and impressive tree.
- It is multi-leadered (3) from two metres. Two of the leaders are almost equally as dominant.
- The leaders have included unions but there is no sign of splitting or weakness at this point.
- There is good root flare but the ground level appears to have been built up slightly years ago. Collar rot may become an issue in the future.
- There is considerable root damage 3m towards Kowhai Park. There is good response growth and minimal decay but the damage is ongoing and still occurring. Mulching the entire circle that the tree is in will stop mowers from damaging roots and deter parking machinery on it.
- The trees canopy is weighted towards the Glenn Logie info sign. Probably due to suppression from a large *Acmena sp.* and other trees which have since been pruned away or removed.
- There is some minor deadwood and stubs.
- There has been a recent clearance prune over the driveway.
- One old pruning wound is weeping but decay is minimal.
- There are other large and well-formed natives in the garden including: *Alectryon excelsus* (titoki), *Metrosideros robusta* (northern rata), *Podocarpus totara* (totara) and *Vitex lucens* (puriri).

Recommendations:

- Mulch entire island surrounded by driveway.

Full Tree Evaluation Score Sheet

Dacrydium cupressinum 6.11.13

Condition Evaluation						Score
Points	3	9	15	21	27	
Form	Poor	Moderate	Good	Very good	Specimen	15
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	21
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	15
Function	Minor	Useful	Important	Significant	Major	21
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	27
Subtotal Points						99

Amenity Evaluation						Score
Points	3	9	15	21	27	
Stature (m)	3 to 8	9 to 14	15 to 20	21 to 26	27+	15
Visibility (km)	0.5	1.0	2.0	4.0	8.0	3
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	9
Role	Minor	Moderate	Important	Significant	Major	15
Climate	Minor	Moderate	Important	Significant	Major	9
Subtotal Points						51

Notable Evaluation						Score
Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	
Stature						
• Feature						3
• Form						3
Historic						
• Age 100+						3
• Association						3
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						12
Total Points						162









STEM Evaluation for:
Pterocarya X rehderana
(Hybrid Wingnut) - Exotic
Location: Peat Park (2 trees)
STEM Score: 219 & 207

Assessed by: Marc Higgle, Consultant Arborist, 7 November 2013

History:

Identified by Chris Ecroyd.

Visual Comments:

Tree 1 (closest to Halswell Street):

- Very impressive, spreading tree although one sided due to suppression from neighbouring *Quercus* sp.
- Four main leaders from 1-2m. One has overall dominance and one has been reduced back severely.
- The tree was in heavy flower at time of the assessment.
- There is some tip dieback present.
- There is good response growth on old wounds. Some cavities are present with some decay.
- Lovely gnarled basal area and a large area of exposed roots.
- There is significant root damage all around the tree up to 8m from the trunk. The damage affects large roots and is almost certainly due to lawn mowers. While there is some decay present, considering the extent of damage, it is minor.

Tree 2:

- This tree is of slightly poorer form and is becoming very sparse. Another look in summer would benefit in assessing its sparseness and vigour.
- There is a lot of larger epicormic response growth as a result of pruning work years ago or from another stress event.
- There is good response growth to large pruning wounds.
- There are two cabbage trees (*Cordyline australis*) growing in a large cavity. There are other cavities present.
- There is some root damage but not to the same extent as in Tree 1.
- The tree has a similar impressive basal area.
- The roots are lifting concrete on corner of unused changing rooms.
- There is some deadwood present including one >150mm diameter branch.

Recommendations:

Tree 1:

- Mow lawns higher around the root damaged area.
- Light pruning of the oak would give the wingnut more room but it is unlikely to fill out into the new space so probably not worthwhile.

Tree 2:

- Monitor the tree for sparseness and decline.
- Deadwood prune.



Tree 2

Full Tree Evaluation Score Sheet

Pterocarya x ~~betula~~ *rehderana* 1/2 closest to *Hobwell* 7.11.13

Condition Evaluation						Score
Points	3	9	15	21	27	
Form	Poor	Moderate	Good	Very good	Specimen	21
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	27
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	15
Function	Minor	Useful	Important	Significant	Major	9
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	27
Subtotal Points						99

Amenity Evaluation						Score
Points	3	9	15	21	27	
Stature (m)	3 to 8	9 to 14	15 to 20	21 to 26	27+	21
Visibility (km)	0.5	1.0	2.0	4.0	8.0	3
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	9
Role	Minor	Moderate	Important	Significant	Major	15
Climate	Minor	Moderate	Important	Significant	Major	9
Subtotal Points						57

Notable Evaluation						Score
Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	
Stature						
• Feature						21
• Form						21
Historic						
• Age 100+						21
• Association						
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						63
Total Points						219

Full Tree Evaluation Score Sheet

Pterocarya x rehderana 2/2 7.11.13

Condition Evaluation						
Points	3	9	15	21	27	Score
Form	Poor	Moderate	Good	Very good	Specimen	15
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	27
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	9
Function	Minor	Useful	Important	Significant	Major	9
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	27
Subtotal Points						87

Amenity Evaluation						
Points	3	9	15	21	27	Score
Stature (m)	3 to 8	9 to 14	15 to 20	21 to 26	27+	21
Visibility (km)	0.5	1.0	2.0	4.0	8.0	3
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	9
Role	Minor	Moderate	Important	Significant	Major	15
Climate	Minor	Moderate	Important	Significant	Major	9
Subtotal Points						57

Notable Evaluation						
Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						21
• Form						21
Historic						
• Age 100+						21
• Association						
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						63
Total Points						207

Tree 2







Root damage

Tree 2







STEM Evaluation for:

Metasequoia glyptostroboides – 6 trees

(Dawn Redwood) - Exotic

Location: Ah Collins Park, Kauangaroa Road

STEM Score: 177

Assessed by: Marc Higgle, Consultant Arborist, 16 December 2013

History:

Planted by AH Collins.

Visual Comments:

- A very impressive group of trees growing in perfect conditions.
- It is impossible to view them in their entirety at once due to other mature exotic planted close by.
- I could not determine which tree was the tallest and thought to be the second tallest known in New Zealand.
- They are all of similar size.
- There is no stock underneath or traffic that could damage the rootplate.



Full Tree Evaluation Score Sheet

Metasequoia glyptostroboides X6 16.12.13

Condition Evaluation						Score
Points	3	9	15	21	27	
Form	Poor	Moderate	Good	Very good	Specimen	27
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	15
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	21
Function	Minor	Useful	Important	Significant	Major	15
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	15
Subtotal Points						93

Amenity Evaluation

Points	3	9	15	21	27	Score
Stature (m)	3 to 8	9 to 14	15 to 20	21 to 26	27+	27
Visibility (km)	0.5	1.0	2.0	4.0	8.0	3
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	3
Role	Minor	Moderate	Important	Significant	Major	3
Climate	Minor	Moderate	Important	Significant	Major	3
Subtotal Points						39

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						21
• Form						21
Historic						
• Age 100+						
• Association						3
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						45
Total Points						177











STEM Evaluation for:

Quercus sp. – 7 trees

(Oak) - Exotic

Location: Cornmarket Reserve

STEM Score: 96

Assessed by: Marc Higgle, Consultant Arborist, 12 December 2013

History:

Planted by the late Mayor Chas Pointer to commemorate an event.

Visual Comments:

- A nice grouping of oaks, probably all hybrids. There may be records that show what they were bought as.
- In the assessment the Commemoration score is set at low as it is not currently known what the planting commemorates. If it were known, the STEM scoring could be adjusted.
- There is a group of five in one mulch circle and one tree on either side set a little away. These lone two could be a slightly earlier planting and look to be the same species but different to any in the group of five. I have included all seven trees in the assessment.
- The group of five trees appear to be four different species/hybrids.
- They are planted very close to each other and are already growing into each other. This will create problems in the future and two or more may need to be removed to allow room for the remaining trees to grow.
- They have all been pruned with good response growth. They could all do with a substantial formative prune.
- The mulch circle is doing a great job of protecting the roots but is a little close to the trees on the outside.
- All trees in the mulch circle show good root flare although two are only on one side. One may have had a partial root-plate failure which has grown and corrected itself.
- One tree has three visible small girdling roots and I suspect there may be more beneath the soil.

Recommendations:

- Cut/chisel girdling roots out to prevent stress and potential failure.
- Formative prune all trees.
- Enlarge mulch circle to protect more of root-plate.
- Consider future removal of at least two trees to allow for future growth of remaining trees.

Full Tree Evaluation Score Sheet

Quercus sp. x 7 12.12.13

Condition Evaluation						Score
Points	3	9	15	21	27	
Form	Poor	Moderate	Good	Very good	Specimen	9
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	9 9
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	21
Function	Minor	Useful	Important	Significant	Major	3
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	3 9
Subtotal Points						51

Amenity Evaluation						Score
Points	3	9	15	21	27	
Stature (m)	3 to 8	9 to 14	15 to 20	21 to 26	27+	3
Visibility (km)	0.5	1.0	2.0	4.0	8.0	3
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	9
Role	Minor	Moderate	Important	Significant	Major	9
Climate	Minor	Moderate	Important	Significant	Major	3
Subtotal Points						27

Notable Evaluation						Score
Recognition Points	Local	District	Regional	National	International	
	3	9	15	21	27	
Stature						
• Feature						
• Form						
Historic						
• Age 100+						
• Association						15
• Commemoration						3
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						18
Total Points						96





Different foliage of the trees.



Partial root-plate failure which has corrected itself.



Girdling roots.



STEM Evaluation for:
***Metrosideros excelsa* - 14 trees**
(Pohutukawa) - Native

Location: Wanganui Racecourse, Purnell Street

STEM Score: 13 trees scored 138, 1 tree scored 189

Assessed by: Marc Higgie, Consultant Arborist, 12 December 2013

History:

None known at this stage.

Visual Comments:

I have numbered the trees from 1 – 14 starting at the Wanganui High School end and ending with the larger pohutukawa being number 14.

- There are thirteen younger, well-formed trees lining Purnell Street.
- As they grow bigger they will add impact to the streetscape.
- Most of the trees are as yet un-pruned and would benefit a formative and deadwood prune.
- There is some damage to exposed roots from lawn mowers.
- Three trees (Tree #'s 2,6 and 8) are fairly sparse with tree #6 being mainly on the roadside.
- Tree #6 also has ivy growing at its base.

Tree # 14

- This is an older and larger specimen than the other trees. It is also quite a stunning tree.
- It has great form and is very unusual in the extent of its aerial roots creating an extremely dense structure.
- It is growing very close to Tree #'s 12 and 13. These two trees could even be removed to enhance and allow room for the bigger tree.

Recommendations:

- Give all trees a formative and deadwood prune.
- Install larger mulch rings for each tree.
- Monitor tree #'s 2, 6 and 8.
- Consider removal of tree #'s 12 and 13 to allow room for tree # 14.

Full Tree Evaluation Score Sheet

Metrosideros excelsa x 13 Racecourse 12.12.13

Condition Evaluation

Points	3	9	15	21	27	Score
Form	Poor	Moderate	Good	Very good	Specimen	21
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	9
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	21
Function	Minor	Useful	Important	Significant	Major	15
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	15
Subtotal Points						81

Amenity Evaluation

Points	3	9	15	21	27	Score
Stature (m)	3 to 8	9 to 14	15 to 20	21 to 26	27+	9
Visibility (km)	0.5	1.0	2.0	4.0	8.0	3
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	15
Role	Minor	Moderate	Important	Significant	Major	21
Climate	Minor	Moderate	Important	Significant	Major	9
Subtotal Points						57

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						
• Form						
Historic						
• Age 100+						
• Association						
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						0
Total Points						138

Full Tree Evaluation Score Sheet

Metrosideros excelsa (large specimen at Raccoonuse) 12.12.13

Condition Evaluation						Score
Points	3	9	15	21	27	
Form	Poor	Moderate	Good	Very good	Specimen	27
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	9
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	21
Function	Minor	Useful	Important	Significant	Major	15
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	27
Subtotal Points						99

Amenity Evaluation						Score
Points	3	9	15	21	27	
Stature (m)	3 to 8	9 to 14	15 to 20	21 to 26	27+	21
Visibility (km)	0.5	1.0	2.0	4.0	8.0	3
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	15
Role	Minor	Moderate	Important	Significant	Major	21
Climate	Minor	Moderate	Important	Significant	Major	9
Subtotal Points						69

Notable Evaluation						Score
Recognition Points	Local	District	Regional	National	International	
	3	9	15	21	27	
Stature						
• Feature						15
• Form						3
Historic						
• Age 100+						3
• Association						
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						21
Total Points						189



Tree #2 at right.



Tree # 6



Tree #8





Root damage.



Both photos show Tree # 14 in relation to Tree #'s 12 and 13.

These and following photos: Tree #14 and extensive aerial roots.





STEM Evaluation for:

Eucalyptus cornuta

Yate - Exotic

Location: Hipango Terrace

STEM Score: 207

Assessed by: Marc Higgle, Consultant Arborist, 12 December 2013

History:

None known at this stage.

Visual Comments:

- An impressive tree, well protected on the reserve hill side above the Durie Hill steps.
- One main leader has failed leaving a torn stub.
- There is evidence of past prunings and a window in the canopy suggest other past failures.
- There is some sizeable deadwood in the canopy. Otherwise the canopy is healthy.
- It was flowering at the time of assessment and would be a good seed source.
- It is a honey producing gum and a good food source for bees and nectar birds.
- Numerous trees (*Corymbia ficifolia* and *Vitex lucens*) have been planted within 3m of the trunk. This will create future problems if the new trees are left to grow.

Recommendations:

- Deadwood canopy and tidy up broken stubs.
- Remove recently planted trees under canopy.



Full Tree Evaluation Score Sheet

Eucalyptus cornuta

12.12.13

Condition Evaluation

Points	3	9	15	21	27	Score
Form	Poor	Moderate	Good	Very good	Specimen	21
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	27
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	15
Function	Minor	Useful	Important	Significant	Major	15
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	21
Subtotal Points						99

Amenity Evaluation

Points	3	9	15	21	27	Score
Stature (m)	3 to 8	9 to 14	15 to 20	21 to 26	27+	15
Visibility (km)	0.5	1.0	2.0	4.0	8.0	9
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	15
Role	Minor	Moderate	Important	Significant	Major	9
Climate	Minor	Moderate	Important	Significant	Major	9
Subtotal Points						57

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						15
• Form						21
Historic						
• Age 100+						
• Association						
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						15
• Rarity						
• Endangered						
Subtotal Points						51
Total Points						207





STEM Evaluation for:

Podocarpus totara 'Aurea'

(Totara) - Native

Location: Behind Davis Library in Queens Park

STEM Score: 123

Assessed by: Marc Higgle, Consultant Arborist, 7 November 2013

History:

The tree marks the site of the burial of Te Taurawhiri, the library pou, April 1999.

Visual Comments:

- A handsome young tree with reasonable form and good opportunity to encourage it into specimen form.
- The tree has two co-dominant leaders from 2m and one branch which has turned apical.
- It has good open form considering its exposed site.
- The tree protection has done well but could be removed now to allow for future trunk growth.
- The tree has had some fairly recent lower branches removed which have left some poor pruning cuts.
- The tree has no visible damage/restrictions and has huge potential for optimum growth.

Recommendations:

- Remove tree protection.
- Install a larger mulch ring which would protect its roots from future damage and encourage good root health.
- Removing apical dominance in one branch and one co-dominant leader will encourage the tree to grow to great form.
- A light crown thin/formative prune would open the tree up.

Full Tree Evaluation Score Sheet

Podocarpus totara 'Aurea' 7.11.13

Condition Evaluation

Points	3	9	15	21	27	Score
Form	Poor	Moderate	Good	Very good	Specimen	15
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	15
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	21
Function	Minor	Useful	Important	Significant	Major	9
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	3
Subtotal Points						63

Amenity Evaluation

Points	3	9	15	21	27	Score
Stature (m)	3 to 8	9 to 14	15 to 20	21 to 26	27+	3
Visibility (km)	0.5	1.0	2.0	4.0	8.0	39
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	9
Role	Minor	Moderate	Important	Significant	Major	21
Climate	Minor	Moderate	Important	Significant	Major	3
Subtotal Points						45

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						
• Form						
Historic						
• Age 100+						
• Association						15
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						15
Total Points						123





STEM Evaluation for:
Pinus halepensis
(Aleppo Pine) - Exotic
Location: Queens Park
STEM Score : 180

Assessed by: Marc Higgie, Consultant Arborist, 1 November 2013

History:

Descended from the original Lone Pine in Gallipoli.

Visual Comments:

- Significantly windswept and shaped tree.
- Has had three leaders which have failed and/or been removed and tidied.
- There is good response growth strengthening the point of failure.
- Decay is minimal but there are boring insect holes visible in the deadwood of the failed leaders.
- The tree is growing into and suppressing a neighbouring Pohutukawa.
- The tree is unlikely to straighten itself to gain a more even shape due to the exposed site.
- There is some root damage from mowers.

Recommendations:

- There is a hanger which should be removed.
- A general tidy and light end weight reduction would clear the tree from the Pohutukawa.
- A larger mulch circle would exclude mowers from inflicting further damage.





