

STEM Evaluation for Wanganui Protected Trees

Tree Number 2 - *Ficus macrophylla*

(Morten Bay Fig)

Exotic

Location: Moutoa Gardens (Pakaitore)

Assessed by: Marc Higgie, Consultant Arborist, 2 November 2012

History:

This tree was planted during the original landscaping of the gardens in the 1880s (1988 assessment). A photograph taken in 1885 show it already as a large tree, and it is believed it was planted by William Parnell, a landscape gardener who came to New Zealand about 1870 (Newspaper December 19, 1959).

Visual Comments:

- Tree is in good health with large amounts of ripe fruit on ground at time of assessment.
- Located in a prominent position of Moutoa Gardens.
- It is a very good specimen for this species this far south in New Zealand, there being another of similar stature in Wellington Botanic Gardens.
- There are obvious signs of large failures within the canopy.
- Root plate has numerous exposed and damaged roots, most probably due to lawn mowers. A solution would be to install a large mulch ring around the dripline of the tree.
- Internal structure fairly messy, typical of species. A light thin in the lower canopy would bring out the trees proportions/stature.



Tree #12

Ficus macrophylla

12

Height - 17m

Width - 31m

Full Tree Evaluation Score Sheet

Condition Evaluation

Points	3	9	15	21	27	Score
Form	Poor	Moderate	Good	Very good	Specimen	27
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	15
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	15
Function	Minor	Useful	Important	Significant	Major	3
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+	27
Visibility (km)	0.5	1.0	2.0	4.0	8.0	9
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	9
Role	Minor	Moderate	Important	Significant	Major	21
Climate	Minor	Moderate	Important	Significant	Major	9
Subtotal Points						75

Notable Evaluation

Recognition Points	Local	District	Regional	National	International	Score
	3	9	15	21	27	
Stature						
• Feature						21
• Form						9
Historic						
• Age 100+						15
• Association						
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						45
Total Points						207



Root plate with exposed and damaged roots.

STEM Evaluation for Wanganui Protected Trees

Tree Number 6 – *Metrosideros excelsa*

(Pohutukawa)

Native

Location: Moutoa Gardens

Assessed by: Marc Higgie, Consultant Arborist, 21 March 2013

History:

No history known at this stage.

Visual Comments:

- Impressive tree, although somewhat overshadowed by its close neighbouring Pohutukawa.
- Good network of leaders which appear to have good strong unions.
- Some exposed roots have been damaged in the past but grass has been shaded out so should not occur in the future.

Recommendations:

- Installation of a mulch circle would be beneficial.



Tree #6 *Metrosideros excelsa*

Full Tree Evaluation Score Sheet

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	15
Function	Minor	Useful	Important	Significant	Major	15
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+	15
Visibility (km)	0.5	1.0	2.0	4.0	8.0	9
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	District	Regional	National	International	Score
	3	9	15	21	27	
Stature						
• Feature						
• Form						9
Historic						
• Age 100+						9
• Association						
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						18
Total Points						162



STEM Evaluation for Whanganui Protected Trees

Tree Number 15 – *Metrosideros excelsa*

(Pohutukawa)

Native

Location: Moutoa Gardens

Assessed by: Marc Higgie, Consultant Arborist, 7 May 2013

History:

None known at this stage.

Visual Comments:

- Very large, impressive tree – possibly the largest in Whanganui.
- Very healthy considering its sign and age.
- Massive basal area.
- Seven main leaders with aerial roots snaking down trunks to the ground.
- There is a large 'window' in the interior canopy but there is no sign of internal branch failures so most probably the leaders have split apart with the huge weight forces that are present.
- There are two separate steel braces installed holding the four heaviest leaders from spreading any further.
- They are holding the leaders but the braces should not be relied upon 100%. Regular monitoring for sign of movement should be put in place. This could involve a simple visual check after storms or a more precise measurement which can be checked at any time.
- There is some sign of pruning above the footpath but otherwise the tree is largely untouched.
- There is some damage to exposed roots but this area has been shaded out and does not require mowing anymore.
- The tree is regularly climbed into the main unions by users of the gardens.
- The plaque is no longer attached or visible.

Recommendations:

- Replace plaque.
- Monitor for signs of leaders splitting out any further.



Tree #15 *Metrosideros excelsa*
Full Tree Evaluation Score Sheet

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	15
Function	Minor	Useful	Important	Significant	Major	15
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+	27
Visibility (km)	0.5	1.0	2.0	4.0	8.0	9
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						69

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						9
• Form						9
Historic						
• Age 100+						9
• Association						
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						27
Total Points						183









Steel bracing attachment into Pohutukawa leader.

STEM Evaluation for Wanganui Protected Trees

Tree Number 19 – *Agathis australis*

(Kauri)

Native

Location: Moutoa Gardens

Assessed by: Marc Higgie, Consultant Arborist, 18 March 2013

History:

“Planted by Lord Galway, Governor General of New Zealand (April 1935 – February 1941).” – Streets of Wanganui 1989 – Page 52

Visual Comments:

- Good single leaedered Kauri
- Still in its juvenile form but one of the larger in the area.
- Plenty of room around it to develop.

Recommendations:

- The tree would benefit from less traffic over its root plate and thus a mulch circle would help.
- Monitor the tree for Kauri Dieback Disease and keep up to date with the disease progression/development throughout the country.
- Turf aeration and introduction of beneficial Mycorrhizal organisms may be an option to think about in the future.

Tree #19 *Agathis australis*.
Full Tree Evaluation Score Sheet

Condition Evaluation

Points	3	9	15	21	27	Score
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	9
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	27
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	9
Role	Minor	Moderate	Important	Significant	Major	15
Climate	Minor	Moderate	Important	Significant	Major	3
Subtotal Points						51

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						3
• Form						3
Historic						
• Age 100+						9
• Association						21
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						36
Total Points						186



Agathis australis with Tree # 73 *Washingtonia robusta* behind.

STEM Evaluation for Wanganui Protected Trees

Tree Number 26 – *Quercus robur*

(English Oak)

Exotic

Location: Moutoa Gardens (Pakaitore)

Assessed by: Marc Higgie, Consultant Arborist, 2 November 2012

History:

The inscription on the stone at the foot of the tree reads: "This oak was planted by the wife of Mr A. D. Willis, MHR, on Saturday 9 August 1902, to celebrate the signing of peace in South Africa ." (1988 assessment).

Visual Comments:

- Nice compact tree in good health.
- Plaque at foot of tree no longer there.
- No cavities or rot noted.
- Some tip die back in crown.
- Could do with a deadwood and very minor crown thin.



Tree # 26

Quercus robur

12

Height - 10m

Width - 21m

Full Tree Evaluation Score Sheet

Condition Evaluation

Points	3	9	15	21	27	Score
Form	Poor	Moderate	Good	Very good	Specimen	9
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	9
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						69

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	9
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						51

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						
• Form						
Historic						
• Age 100+						3
• Association						
• Commemoration						27
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						30
Total Points						150

STEM Evaluation for Wanganui Protected Trees

Tree Number 27 – *Quercus robur*

(English Oak)

Exotic

Location: Moutoa Gardens (Pakaitore)

Assessed by: Marc Higgie, Consultant Arborist, 2 November 2012

History:

Planted 6 August 1902 by the Mayoress, Mrs Hatrick, to commemorate the coronation of King Edward VII and Queen Alexandra (1988 assessment).

Visual Comments:

- Tree in good health with no sign of decay or cavities.
- Pronounced lean northwards.
- Fairly sparse above toilet block.
- Some dieback in crown.
- Two small wounds on basal flare. Old and callousing well.
- Impressive network of branches.
- Surroundings would be opened up with a deadwood and very minor crown thin.



Tree #27
Quercus robur

12

Height (m) - Approx 12m
 Average width (m) - 23

Full Tree Evaluation Score Sheet

Condition Evaluation

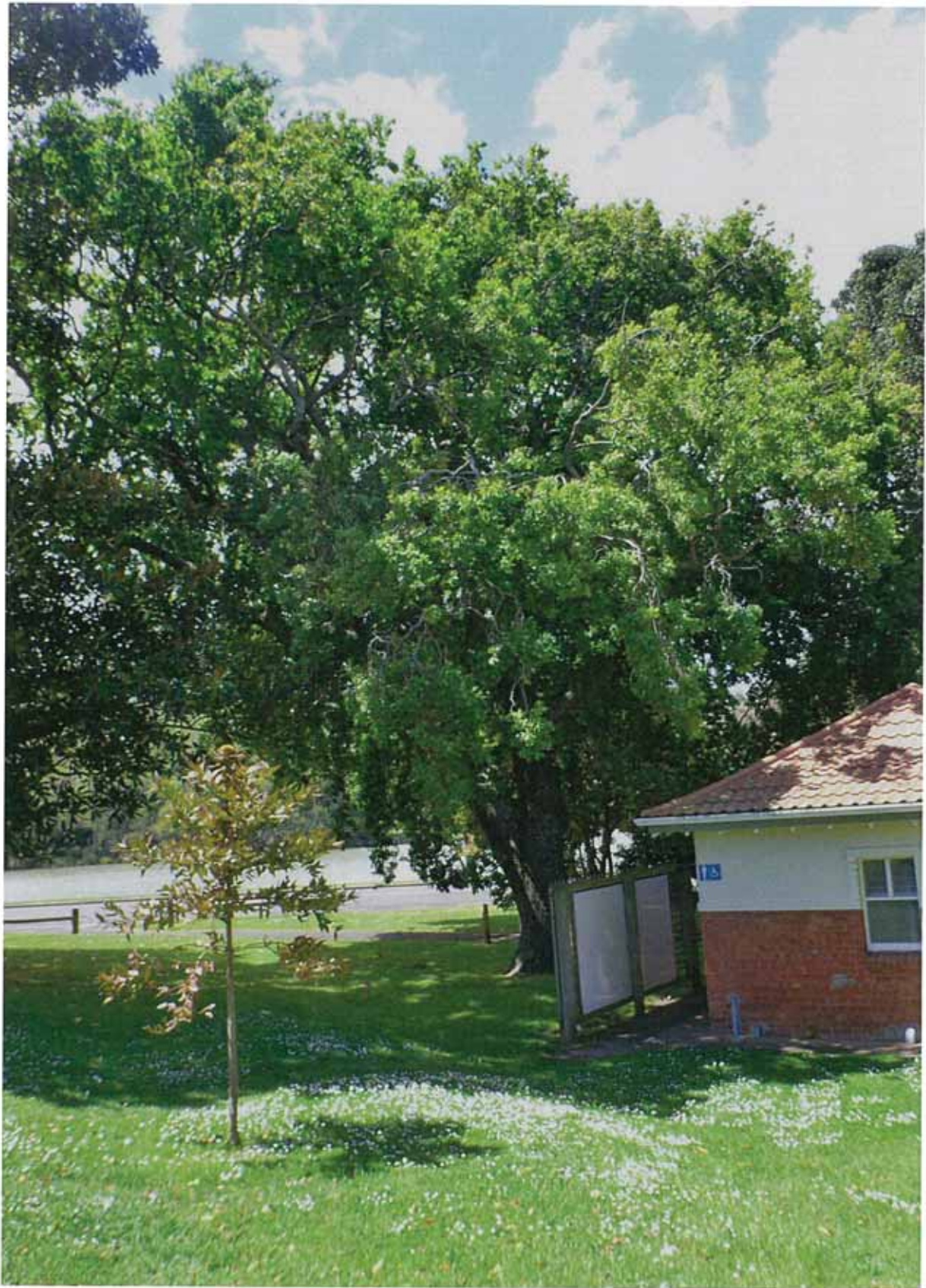
Points	3	9	15	21	27	Score
Form	Poor	Moderate	Good	Very good	Specimen	15
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	9
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	15
Function	Minor	Useful	Important	Significant	Major	9
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	27
Subtotal Points						75

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	9
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	9
Role	Minor	Moderate	Important	Significant	Major	3
Climate	Minor	Moderate	Important	Significant	Major	3
Subtotal Points						42

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						
• Form						
Historic						
• Age 100+						3
• Association						3
• Commemoration						27
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						30
Total Points						147



Showing situation and lean of tree.

STEM Evaluation for Wanganui Protected Trees

Tree Number 73 – *Washingtonia robusta*

(Mexican Fan Palm, Skyduster Palm)

Exotic

Location: Moutoa Gardens

Assessed by: Marc Higgie, Consultant Arborist, 18 March 2013

History:

None known at this stage.

Visual Comments:

- Very tall specimen for this area.
- Not perfectly straight but no pronounced lean.
- Great that two seedlings of different ages have been left to regenerate and succeed.



Tree # 73
Washingtonia robusta 12

Full Tree Evaluation Score Sheet

Condition Evaluation

Points	3	9	15	21	27	Score
Form	Poor	Moderate	Good	Very good	Specimen	21
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	15
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	21
Function	Minor	Useful	Important	Significant	Major	3
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	9
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	9
Role	Minor	Moderate	Important	Significant	Major	3
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						39
• Form						3
Historic						
• Age 100+						15
• Association						
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						1527
Total Points						147 159

STEM Evaluation for Wanganui Protected Trees

Tree Number 83 – *Vitex lucens*

(Puriri)

Native

Location: Moutoa Gardens

Assessed by: Marc Higgie, Consultant Arborist, 21 March 2013

History:

No history known at this stage.

Visual Comments:

- Nice tree, multi-branched and typical from for an open grown forest tree.
- Large pruning wound callousing nicely.
- Plaque all but grown in, may still be salvageable.
- There is extensive damage to exposed roots which could have been avoided had a mulch circle, to keep mowers and other traffic off, been put down. There is rot and decay setting into some of these roots.
- Large amount of seed present.

Recommendations:

- Remove and replace plaque.
- Deadwood and minor crown thin/formative prune.
- Install mulch circle.



Tree # 83

Parish Vitex lucens

Full Tree Evaluation Score Sheet

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	15
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	21
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+	9
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	9
Subtotal Points						39

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						
• Form						3
Historic						
• Age 100+						
• Association						
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						3
• Rarity						
• Endangered						*
Subtotal Points						36
Total Points						132



