

# STEM Evaluation for Wanganui Protected Trees

## Tree Number 10 – *Cinnamomum camphora*

### (Camphor Tree, Camphor Laurel)

#### Exotic

#### Location: 67 Ikitara Road

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

#### History:

"A handsome tree which is rarely found south of Wanganui. This tree was part of the original Nixon Estate." – 1988 assessment.

The owner of the property also told me some history of the property which would need verification as it contradicts the above statement. Although they could both be in a different timeframe. I was told that "A man Foster lived here and was the officer in charge of importing agricultural products into New Zealand and everything came through his Wanganui office. He grew and planted some of all of the tree seeds that were imported and planted them in geographical plantings."

#### Visual Comments:

- This is a lovely camphor tree.
- It has five leaders from ground level. There was another one which failed a year ago, narrowly missing the house.
- The canopy is very healthy although there is some minor branch dieback.
- The tree has good structure.
- A pair of kereru was resident when I was there.
- Another tree (*Syzygium ventenatii*) on the property has been given the plaque meant for this tree so there has been some confusion as to which tree is protected. The plaque has nearly totally grown in.
- There is a build up of organic waste near the base of the trunk. There is no concern at the moment but if it got any looser, there would be a concern of eventual collar rot.
- There is a probable seedling growing closer to the road and could be encouraged to grow as an eventual replacement for its parent.
- Other interesting trees growing in the same property or close to the boundary are: *Syzygium ventenatii* (weeping lilly pilly), *Ginkgo biloba* - male (ginko), *Lagunaria patersonia* (Norfolk Island hibiscus), *Washingtonia robusta* (Mexican Fan Palm), *Livistona sp.* (Cabbage palm) and *Pistacia chinensis* (Chinese pistachio).

#### Recommendations:

- Correct placement of plaque.
- Monitor the proximity of organic matter against the trunk.
- Removal of *Phoenix canariensis* growing at base.

Tree # *Cinnamomum camphora*  
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	21
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						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	3
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	15
Role	Minor	Moderate	Important	Significant	Major	7
Climate	Minor	Moderate	Important	Significant	Major	9
Subtotal Points						51

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						15
• Form						15
Historic						
• Age 100+						21
• Association						9
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						15
• Endangered						
Subtotal Points						81
Total Points						219











# STEM Evaluation for Wanganui Protected Trees

## Tree Number 12 – *Castanea sativa*

### (Spanish Chestnut, Sweet Chestnut)

#### Exotic

#### Location: Sedgebrook Street

Assessed by: Marc Higgle, Consultant Arborist, 22 May 2013

#### History:

"Planted in the late 1850's near the Matarawa Stream or Nixon's Creek, it was originally in the grounds of Sedgebrook Grange, Home of Major Nixon, one of the early settlers." – 1988 assessment.

#### Visual Comments:

- Outstanding specimen. Biggest and best form and structured chestnut I have seen.
- A truly majestic tree.
- Single leaedered, massive girth and large buttress.
- Good crop of medium sized nuts present.
- It has had some large branches removed in the past but it is not very noticeable except for the large window in the canopy up high. There has been two or more branches removed on the property side as well as a property reduction of lower branches, that has caused this window. It is not dominant from the street.
- There is good lawn space around the root plate with little infrastructure around to damage the tree.
- There are some exposed roots with old damage to them.
- There is ivy and cotoneaster growing at the base.
- I am not 100% sure of the species. It is unlikely to be anything other than *Castanea sativa* given the age but the leaf size indicates that it could be the much rarer *Castanea crenata* or *C. dentata*.
- If it is the normal chestnut it is an exceptional specimen and worthy of being propagated from.



Tree #12 *Castanea sativa*  
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	15
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	27
Subtotal Points						105

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	27
Role	Minor	Moderate	Important	Significant	Major	21
Climate	Minor	Moderate	Important	Significant	Major	15
Subtotal Points						93

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						21
• Form						21
Historic						
• Age 100+						15
• Association						9
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						66
Total Points						264









(Above) Pruned and reduced branches creating a window in the canopy on the property side of tree.







# STEM Evaluation for Wanganui Protected Trees

## Tree Number 30 – *Dacrydium cupressinum*

(Rimu)

Native

Location: 25 Nile Street

Assessed by: Marc Higgle, Consultant Arborist, 11 June 2013

### History:

None known at this stage.

### Visual Comments:

- Good example of an open grown rimu.
- The tree has three leaders from 1m but the main leader is still dominant.
- There have been three or more, smaller leaders removed some years ago. The pruning cuts were poor.
- From approximately 8m the tree has been forced to grow on a pronounced lead by a kauri planted 7feet away. The kauri is dominant and suppressing the rimu.
- The two trees were planted too close for them both to reach maturity. One should go eventually and in some respects the sooner the better as this will give the remaining tree longer to 'right' itself and fill out to a well-balanced tree.
- The tree has great potential to grow into a large majestic tree if the kauri was completely removed or the encroaching branches removed.
- On the rimu, the smallest leader could be removed and the mid-sized leader reduced to a lower branch growing over the fence. Giving a light crown thin/formative prune would promote better shape into the tree and allow more light into the garden and house below.
- There is some minor damage to an exposed root and the tree would benefit from having a mulch circle and/or garden around it.
- There is no plaque.
- The owners are concerned about roots interfering with their house. The house is on a concrete pad which is reasonably new and therefore should not have any weaknesses. There are no cracks visible. Monitoring for any suspected movement is advised and if concerned, exploratory digging can determine if there is cause to act. If there is any interference, regular root pruning at a specified distance from the tree or installing a root barrier system could be considered.

### Recommendations:

- Ideally remove the kauri close by but if that isn't an option, removal of the larger branches encroaching into the rimu would give more room for the rimu to grow.
- Remove the small leader and reduce the other to a branch growing over the fence. Give a light crown thin/formative prune.
- Install a plaque.



Tree # 30 *Dacrydium cupressinum*  
 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	21
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						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+	159
Visibility (km)	0.5	1.0	2.0	4.0	8.0	3
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	21
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						3
• Form						3
Historic						
• Age 100+						
• Association						
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						6
Total Points						156







# STEM Evaluation for Wanganui Protected Trees

## Tree Number 50 – *Agathis australis*

(Kauri)

Native

Location: 25 Nile Street

Assessed by: Marc Higgie, Consultant Arborist, 11 June 2013

### History:

None known at this stage.

### Visual Comments:

- This tree has poor form with three leaders from 2m.
- The unions are partially included but secure.
- The two smaller leaders grow very close to each other and will start growing into each other before too long. If one leader were removed, the structure of the unions would be weakened and if both were removed there would be a chance that the whole tree would decline due to stress and shock as the leaders are fairly large. Removal of the leaders would also expose the weakened remaining leader.
- The corner of the house is only a few metres away.
- The tree is planted 7feet from a protected rimu and is suppressing the rimu's growth.
- A large limb was removed at the same time as a protected totara was removed nearby.
- There are some larger branches growing out over the corner of the house.
- I would support the removal of the tree to allow the rimu to grow into its full potential.
- The kauri is poorly formed and its removal would alleviate future problems that will need to be addressed anyway i.e. leaders growing into each other and needing removal and both trees growing with poor form due to their close proximity.
- One point against removal of the whole tree is that it will leave the rimu exposed. But the gap would not be into the prevailing wind and it would be better to expose it sooner rather than later.
- The owners have concerns over the safety of them and their property and would like to remove the kauri whilst leaving and encouraging the rimu into a better tree. They are also concerned about roots interfering with their house. The house is on a concrete pad which is reasonably new and therefore should not have any weaknesses. There are no cracks visible. Monitoring for any suspected movement is advised and if concerned, exploratory digging can determine if there is cause to act. If there is any interference, regular root pruning at a specified distance from the tree or installing a root barrier system could be considered.

### Recommendations:

- Ideally remove the kauri but if that isn't an option, removal of the larger branches encroaching into the rimu would give more room for the rimu to grow.



Tree #50 *Agathis australis*  
Full Tree Evaluation Score Sheet

Condition Evaluation

Points	3	9	15	21	27	Score
Form	Poor	Moderate	Good	Very good	Specimen	3
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	15
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	15
Function	Minor	Useful	Important	Significant	Major	9
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	21
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+	9
Visibility (km)	0.5	1.0	2.0	4.0	8.0	9
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	21
Role	Minor	Moderate	Important	Significant	Major	3
Climate	Minor	Moderate	Important	Significant	Major	9
Subtotal Points						51

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						114







# STEM Evaluation for Wanganui Protected Trees

## Tree Number 55 – *Brachychiton discolor*

(Scrub Bottle Tree, White Kurrajong, Lacebark Kurrajong)

Exotic

Location: 71a Ikitara Road

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

### History:

"This is a rare tree in New Zealand." – 1988 assessment.

### Visual Comments:

- Stunning specimen with two main leaders and one apical branch.
- Seed present high up in the canopy.
- The trunk is a huge diameter.
- It is difficult to see the tree in its entirety due to bamboo and other undergrowth close by.
- There are some defoliated branches higher up but this species can be semi-deciduous in cooler climates and *Brachychiton sp.* often lose their leaves prior to flowering.
- It has had past prunings.
- There is a gall on the trunk at the first trunk union. This union is also an included bark union. There is no splitting visible and the target if it does fail is low. However it should be monitored.
- There is *Tradescantia fluminensis* (Wandering Jew) growing at the base.
- Other rare and interesting trees growing nearby include: *Acmena sp.*, *Magnolia grandiflora*, *Brachychiton populneus*, *Juglans regia* (walnut), *Agathis australis* (kauri), *Alectryon excelsus* (titoki), *Dacrydium cupressinum* (rimu), *Metrosideros robusta* (northern rata), *Rhopalostylis sapida*, *Podocarpus totara* (totara) and *Prumnopitys ferruginea* (miro) or *taxifolia* (matai).





Tree #55 *Baccharis aquifolios-discolor*  
 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	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

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	9
Climate	Minor	Moderate	Important	Significant	Major	9
Subtotal Points						45

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						15
• Form						15
Historic						
• Age 100+						15
• Association						39
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						9
• Rarity						9
• Endangered						
Subtotal Points						72
Total Points						216







# STEM Evaluation for Wanganui Protected Trees

## Tree Number 61 – *Magnolia grandiflora*

(Great Laurel Magnolia, Southern Magnolia, Bull Bay)

Exotic

Location: 140 Anzac Parade

Assessed by: Marc Higgle, Consultant Arborist, 22 May 2013

### History:

"A very large, healthy tree planted by Andrew Duncan in 1896. Duncan arrive in Wanganui in the early 1840's and planted many fine trees on this property, few of which are still there." – Newspaper article on history of planters, February 20, 1960 (1988 assessment).

### Visual Comments:

- Beautiful majestic tree, full of character.
- Growing on a pronounced lean, the target is low in that there are no paths or buildings under the lean.
- The lower trunk has a massive girth.
- There is a large cavity at the base with some decay present. It is affecting a small percentage considering the size of the trunk.
- There are free-range chooks underneath which will be adding nutrients to the root plate.
- There are numerous exposed roots which have some damage but it appears there is little mechanical traffic over the root plate nowadays.
- There is an epiphytic fern growing over the larger branches.
- The canopy is becoming sparse high up and it could indicate the beginning of the end. The "end" will hopefully be a long process.
- Presently, there is nothing to indicate a compromise in the trees structural integrity, all unions appear strong there are no obvious past branch failures.
- There are some heavier branches that could be reduced back if the dieback becomes a concern. Those growing over the motel unit below would be starting candidates.
- If there was a height reduction, a considerable amount of the tree would go before reaching good canopy and would thus disfigure the tree. This should be a last ditch effort.
- The owners are concerned about the safety and would like it to be height and weight reduced and de-listed from the protected trees list.





Tree #61 Magnolia grandiflora  
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	15
Function	Minor	Useful	Important	Significant	Major	3
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	27
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+	15
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	9
Climate	Minor	Moderate	Important	Significant	Major	9
Subtotal Points						51

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						9
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						36
Total Points						168









# STEM Evaluation for Wanganui Protected Trees

## Tree Number 68 – *Pseudopanax crassifolius*

(Lancewood, Horoeka)

Native

Location: 5 Willis Street

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

### History:

None known at this stage.

### Visual Comments:

- Small slightly bedraggled looking tree. However, it is looking good for its age and position.
- There is only one remaining where there were five listed.
- There is some branch dieback but it is in good health in the remaining canopy.
- It has had a recent power line clearance but it is barely out of the lines. The pruning cuts were poor, leaving stubs which should be tidied and more clearance given with minimal pruning.
- There are multiple wounds on the trunk which are weeping. They look to have been caused by a hold saw and an axe.
- The lawn is mown right to its base which has some damage. A mulch circle would stop further damage and prolong the life.
- There is fairly recent soil disturbance (trench) 2m away from the base.
- The tree is outside the late Elaenor Burgess' house. She was a keen gardener with many rare and beautiful trees in her large garden. If she had anything to do with the planting of the horoeka, there would be an association score to add to the STEM assessment.

### Recommendations:

- Tidy poor pruning cuts and give better power line clearance.
- Install mulch circle.



Tree #68 *Pseudopanax crassifolius*  
 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	9
Function	Minor	Useful	Important	Significant	Major	3
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	21
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	3
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	21
Role	Minor	Moderate	Important	Significant	Major	3
Climate	Minor	Moderate	Important	Significant	Major	3
Subtotal Points						33

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						
• Rarity						
• Endangered						
Subtotal Points						3
Total Points						99









# STEM Evaluation for Wanganui Protected Trees

## Tree Number 88 – *Fagus sylvatica* 'Purpurea'

### (Copper Beech)

#### Exotic

#### Location: 11 Nile Street

Assessed by: Marc Higgle, Consultant Arborist, 22 May 2013

#### History:

None known at this stage.

#### Visual Comments:

- Very impressive tree, although it is impossible to view it in its entirety at once.
- The tree is of great size and reasonably well balanced. It is not windswept like other specimens around. This tree may be the largest and best specimen in Wanganui.
- Perfect conditions on the property side – it is unobstructed and there are gardens surrounding it adding valuable humus and organic matter to the soil and root plate.
- On one neighbour's side, there is a garage close by.
- The other neighbour has cut back some of the tree over their property a few years back. This has resulted in an unbalanced shape with two medium sized leaders affected.
- It has had a formative prune and crown thin by the owners' arborist daughter, Angie, some years ago. All of the pruning wounds are sealing and callousing nicely.
- Multi-leadered from 1metre.
- There are numerous branch grafts visible, adding to the character of the tree.
- The tree is very healthy.
- Of note are the *Acca sellowiana* (feijoa), *Prunus sp.* (flowering cherry) and *Ilex aquifolium* (holly) growing in the same property.





Tree #88 *Fagus sylvatica* 'Purpurea'  
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	3
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	27
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+	15
Visibility (km)	0.5	1.0	2.0	4.0	8.0	3
Proximity	Forest	Parkland	Group 10+	Group 3+	Solitary	21
Role	Minor	Moderate	Important	Significant	Major	3
Climate	Minor	Moderate	Important	Significant	Major	9
Subtotal Points						51

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						9
• Form						9
Historic						
• Age 100+						3
• Association						
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						21
Total Points						153





