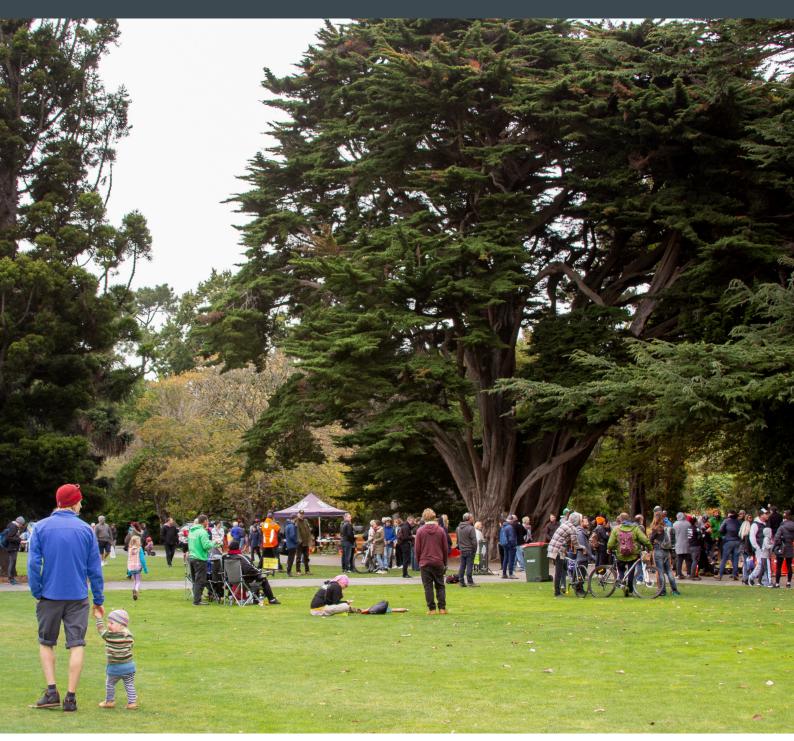


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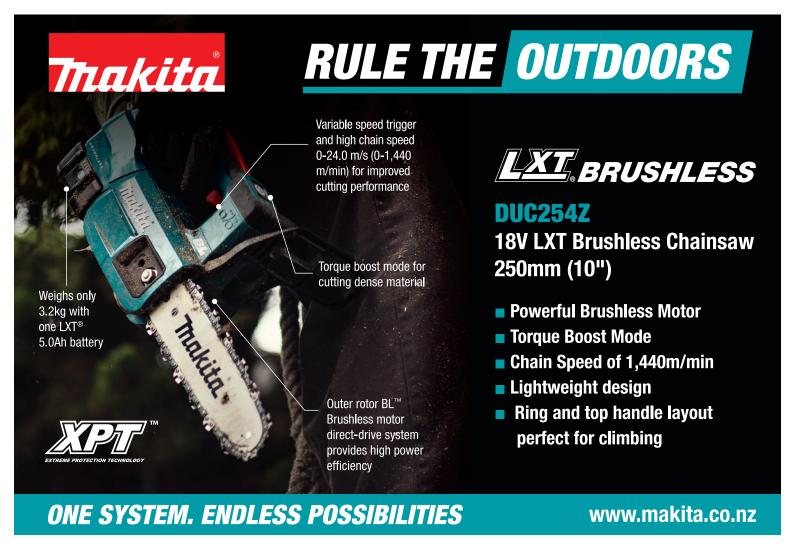
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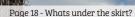


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# **INSIDE THIS ISSUE**

#### Tree Matters Edition 82 Winter 2019 ISSN 1174-4715







Page 10 - Species Profile



Page 24 - Hackfalls Arb Camp



Page 26 - Auckland's Urban Ngahere (Forest) Release

- os President's Branch
- of Editor's Leaf

# Meet Your Representative

07 Five Minutes with James Fletcher

## Tree of Knowledge

- 08 Plant ID Challenge
- 10 Species Profile Tawāpou
- 12 Site Guidance Notes Jeremy Barrell
- 14 Gear Check

# Health and Safety

16 Looking beyond Catastrophic Risk to Health and Wellbeing factors

### In The Urban Forest

- 18 What's Under the Skirt
- 20 Planning Specimen Tree Planting in Tauranga

# Risky Business

22 The Value In Risk

### **Industry News**

- 24 Hackfalls Arb Camp
- 26 Auckland's Urban Ngahere (Forest) Release
- 29 Husqvarna renew Tree Climbing Sponsorship
- 32 Special Asia-Pacific Tree Climbing Championship Feature

# Clippings

- 47 **Matukutūreia**
- 47 Call for volunteers



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# PRESIDENT'S BRANCH



Will Melville
President NZ Arb
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I always like this time of year because it is when I get an opportunity to give back a bit and balance out the tree removals by planting some trees. In my job at Wellington City Council I am lucky enough to be involved in street tree planting and many community-driven native forest regeneration projects. And this year has been no exception.

There is a lot of public interest and government support for tree planting at the moment. Trees that count, Forest and Bird's "Be With a Tree" week, and the government's Billion Trees programme all have wide-ranging support and are getting the public interested and involved in tree planting. As an industry we should be encouraging this involvement and use the opportunity to remind people about the value of established trees and the need to professionally maintain them while they are planting new ones.

This year NZ Arb have partnered with Forest and Bird to support Be With a Tree week, to promote planting days and kids' climbs that our members have participated in around the country. While volunteering at the recent Matariki kids planting in Wellington with my new son, I had the opportunity to be introduced as the president of NZ Arb to Jacinda Ardern where we spoke briefly about the value of trees to the urban environment (as well as the challenges of parenthood). While this is a rare example, NZ Arb members who are participating across the country are speaking with local councillors, MPs, and members of the public, reminding people about the value of caring for trees and the services of professional arborists.

This is my penultimate prez release and the second topic on my mind is health and safety in our industry and the cost of compliance. Along with communicating the value of trees and our services in caring for them, health and safety should be at the forefront of everyone's mind.

During my tenure with NZ Arb there have been a number tree work related incidents and prosecutions by WorkSafe which have led to debate about the cost of compliance and what in some instances has been seen as unreasonable fines imposed on small business.

Managing risk is something that arborists do on a daily basis and we can often focus on the risk associated with tree work and can become unintentionally complacent about other risks in the work environment such as traffic management and other compliance requirements. These are often viewed by some as additional expenses that our customers are not willing to pay for or make pricing uncompetitive.

To be viewed as a professional industry we can't take shortcuts on health and safety and we need to change the narrative with our customers. A hard message to deliver but one that arborists need to reiterate is that we are trying to ensure we go home safe at the end of the day and that there is a cost to that. The short-term financial gain of non-compliance comes at a longer-term expense for the reputation of our industry and devalues the services that we provide.

So to summarise I want to challenge you all to do two things this winter. The first is to be compliant and to report noncompliance, and the second is to plant a tree!



## **EDITOR'S LEAF**



Erika Commers Editor editor@nzarb.org.nz



Recently Science published an article proposing that we need to plant our planet with billions of trees if we are to have any hope of reducing the climate crisis we're now in. Humans inherently know how reliant we are on trees, yet trees are often taken for granted. We see them without really seeing them at all. They are just there, as they should be, providing us with goodness beyond what we can comprehend.

I've spent the better part of my arborist life noticing when tree work hasn't been done well. In Auckland I'm starting to get desperate just to see trees remain within private lots at all. I'm usually horrified when I come across topped trees left butchered with blunt stubs posing as branch ends. I dwell on these sightings, silently threatening that I'm going to start carrying around 'Why Topping Hurts Trees' leaflets to pop into mailboxes.

Ever since my classroom days I have been taught to understand that what we really need in our urban environment is an increase in tree quantity and cover, so I sometimes question whether my focus on poor workmanship isn't misplaced. Yeah, we want our trees to live long and relatively hazard-free lives, but the statistics on the lifespan of urban trees is not in their favour anyway, so I choose my battles. Maybe 'Trees Are Good' is still where we're at with society.

Arborists have a sort of identity crisis. Paul Johnson mentioned this at the Tauranga conference where he gave a keynote speech in 2017. I agree; as 'experts' in knowing trees we are the ones that end up

wearing the badge of 'tree destroyer' as often as not. If anyone can turn that tide, certainly we can and should have control over how we want society to interpret our profession and contribution.

It may seem hard to stand for something that seems so common, but that is because trees are still so unfortunately underrated. But the opportunity continually arises to demonstrate that they are much more important than just nice-to-look-ats. Advocating for trees should be relatively simple, it's far from selling snake oil and we've got on our side the defence of a future that needs protecting.

The greatest thing about being involved in this publication is the continual reminder that arborists are so passionate and real. As clichéd as it sounds there's no better way to describe the authenticity that tree people have for their work and for trees. The articles that find their way to us are never short of being fun, insightful and enthusiastic so I hope you enjoy reading this issue as much as I have. Before you close the cover, don't forget to put aside a few days mid-November to gather with our uniquely cool community in Napier for the New Zealand arboriculture conference. There's never been a better time to make space for trees!



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# **MEET YOUR REPRESENTATIVE**

# Five minutes with... James Fletcher

# We understand that this is your first role in arboriculture; tell us about your career prior to joining Treescape®?

I originally started my career as a litigation solicitor, specialising in employment law, health & safety and commercial disputes. After five years, I did my OE and then came back into a role with Fletchers. Over the last 20 years, I've had various senior management roles in building products, electrical/mechanical, cleaning and facilities management companies, including the likes of OCS and Spotless, where I was the New Zealand Executive General responsible for 8,500 people.

#### What aspects of this role in arboriculture sparked your interest?

Throughout my career, I've had a strong interest in promoting better health & safety cultures and outcomes. Like forestry, the arboriculture industry has a very high health & safety risk profile. As a self-confessed H&S junkie, I found it really exciting to get into a new industry with different challenges and opportunities to pursue.

The other factor was being given the opportunity to take a very successful business to its next level of growth and development, and working with an outstanding board and fantastic people (from the frontline to the senior management team). To be more hands-on and closer to everyone in the business really appealed.

# Having been in the industry for 18 months, what do you believe its greatest opportunities and challenges are?

We continue to face chronic staff and skills shortages as a result of systemic under-investment and limited training capabilities. We are a niche industry that has been lost amongst the primary and electrical sectors, but has a huge role to play in maintaining green assets that

impact on our country's environment and infrastructure. I'm concerned about the current vocational education and immigration policy reviews, as the potential outcomes look to make this problem worse. I'm also concerned that as an industry we need to do more to combat issues of hearing loss, fatigue and mental health which have a far greater impact than the more obvious operational risks.

However, on a positive note, there are huge opportunities ahead of us. With Government investing in the billion trees programme, people becoming more aware of the environment and a better health & safety focus, the industry is well positioned to make a real and visible difference. We've got great people in our industry. We just need to speak up and back ourselves more.

## Tell us the most surprising thing you've learnt about working with trees?

The fact that as a society we are only just starting to understand the real value of trees and their importance to our wellbeing and identity. We are quick to spend a lot of time and money on maintaining or replacing buildings, but less so on the trees around us, which are impossible to replace. And yet, we focus on their replacement value not their "living" value. I think it's time for us to redress that imbalance.

#### And finally, if you were a tree what tree would you be and why?

I'd be a Sequoiadendron Giganteum (Giant Redwood). It might have something to do with the fact that I'm tall, skinny and have longevity genes in my family. It would probably be the only exotic thing about me.











#### **KEYNOTE SPEAKERS**

JEREMY BARRELL (Kindly sponsored by Treescape®) PHILIP VAN WASSENAER JOE HARRIS LYNNE BODDY PHILLIP KELLY RUSSELL HORSEY





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## SPECIES PROFILE

# Tree Species Profile Tawāpou *- Planchonella costata*



#### **NOMENCLATURE:**

Pouteria costata: Planchonella costata (Sapotaceae) Common names include: tawāpou, bastard ironwood (Norfolk Island)

#### SYNONYMS:

Planchonella costata, Pouteria novo-zelandica, Achras costata, Sideroxylon costatum, Sersalisia costata, Mimusops laurina, Achras novozelandica, Achras novo-zelandica, Sideroxylon novo-zelandicum, Planchonella novo-zelandica, Pouteria costata var. austro-montana, Sapota costata, Achras costata

#### **ETYMOLOGY:**

Planchonella, named in honour of the French botanist Jules Émile Planchon. 'costata' is derived from the Latin 'costatus', meaning ribbed, which refers to the prominently raised primary leaf veins.

#### **DISTRIBUTION**

Current Conservation Status: 2012 - At Risk - Relict

Pouteria is a genus of around 100 species in South America and Australia with tawāpou being the only representative of this family in New Zealand. Tawāpou is an indigenous coastal, frost-sensitive plant found as small populations on Norfolk Island and more northern portions of the North Island and its associated offshore islands. Tawāpou is restricted naturally to the upper half of the North Island where it is found only from Te Paki south to the Manukau and Coromandel Peninsula after which it occurs in scattered sites as far south as Tolaga Bay East Cape and Kawhia Harbour in the west.

Tawāpou is common on rodent-free offshore islands in the Hauraki Gulf, around the Coromandel Peninsula, Great Barrier Island, and on the Mokohinau, Poor Knights, Hen & Chickens and Three Kings Islands.

#### **HABITAT**

Tawāpou is strictly coastal from sea level to about 450 m, where it is usually a minor (rarely dominant) component of coastal forest on rocky headlands and talus slopes, windswept ridge-lines, forested islands and islets. It prefers semi-shade and is frost tender. Tawāpou is tolerant of dry conditions

#### **ASSOCIATED SPECIES:**

Forest canopy associates include põhutukawa (Metrosideros excelsa), pūriri (Vitex lucens), karaka (Corynocarpus laevigatus), whau (Entelea arborescens), kõwhai (Sophora chathamica), tawaroa (the northern wide-leaved form of Beilschmedia tawa) and on offshore islands such as the Three Kings, Poor Knights, Mokohinau Islands with coastal maire (Nestegis apetala), Streblus spp., and Hoheria spp.

#### **DESCRIPTION:**

Tawāpou is a most attractive coastal tree achieving a height up to 18 metres tall and trunk up to 1 m diameter. It is a closely branched tree with glossy leathery foliage, firm bark and handsome red-orange berries in autumn. P. costata is fairly slow growing and remains long term as a canopy tree.

#### **CHARACTERISTICS:**

BARK & TWIGS: Tawāpou bark is firm (not flaking) and finely furrowed. It varies in colour from greyish-white to grey-brown. Branchlets are clad in fine appressed hairs when young and exude a milky fluid when broken

LEAF: Leaves are leathery glossy-green and measure from 50 to 100 mm (sometimes up to 150 mm) long and 20 to 50 mm wide, they exude a milky fluid when torn. Leaf form is undivided and elliptic-obovate. Leaf arrangement is alternate, margins are smooth and entire. Leaves appear paler underneath and have downward curved margins and a distinctive vein pattern giving a ribbed appearance. Leaf veins are prominent; the midrib in the centre of the leaf is distinct above and below, as are the lateral veins on each side, which number from 14 to 20, set at a rather wide angle to midrib.

Leaves are initially pubescent (pubescence comprising fine, matted greyish to grey-brown hairs), lactescent, petioles 8-12 mm long, rather stout and rigid. When mature lamina is glabrous except on abaxial midrib.

FLOWER: Flowering occurs early summer from September – November. Flowers are small and greenish yellow, 4-6 mm in diameter, supported on comparatively long flower stalks (about 12 mm), which are pollinated by insects.

FRUIT: Fruiting occurs from December - June.

Tawāpou forms a very distinctive fruit, a large 2.5-4cm long bright oval berry which ripens to a deep red or dark purple and can appear almost black. Each fleshy fruit contains 2 to 4 hard, curved, narrow, glossy black seeds 22-48 mm long.

#### **ECOLOGY**

The fruit is consumed by the kerer $\tilde{u}$ , the New Zealand pigeon, and the  $k\bar{a}k\bar{a}$  parrot. After they have fed on the trees' fleshy fruits, they expel the seeds at a new location. The fruit and seeds of P. costata are also very palatable to rats. Research in New Zealand has shown that the eating of the fruit and the destruction of the seeds by kiore (Pacific rats) has substantially reduced the population of the tree and significantly altered the composition of the coastal forests of the northern North Island. Exotic hemispherical scale insects and spider mites have been found on the foliage.

#### **USES**:

Tawāpou makes an excellent specimen tree for northern New Zealand parks and large gardens, it is showing early signs of success planted as a street and park tree by Auckland council.

The tropical-looking leaves are a stunning feature and the fruits attract birds.

Māori medicine uses the astringent bark and diuretic seeds. Oily substance obtained from boiling the flesh of the berries for three hours is applied to sprains and bruises. It is said to lower blood pressure and clear bruised blood. (Cranwell 1941. Quoted in Brooker, Cambie and Cooper 1987)

Pulp of fruit eaten by Māori.

Hard, bony seeds formerly used by the Māori for necklaces.



#### **WOOD PROPERTIES:**

The white-coloured wood is hard and durable and the Māori use tawāpou logs as rollers to help bring large canoes (waka) onshore.

#### **CULTIVATION:**

Easily grown from fresh seed, difficult from cuttings. Can be a little slow to establish in some sites but once it is established it is moderately fast growing and drought tolerant. The tree is slow growing but will attain a large size when mature.

#### **INTERESTING HISTORY**

Some of the southerly occurrences are associated with pā sites, and as the glossy seeds were used as necklaces by Māori it is possible that this species was planted over some parts of its southern North Island range.

#### **REFERENCES:**

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# TREE OF KNOWLEDGE

# Site Guidance Notes: A new approach to protecting trees during construction

Barrell Tree Consultancy (www.barrelltreecare.co.uk) has been working to promote the importance of existing trees in planning for more than two decades, but what practical wisdom has emerged in the UK from more than 7,000 completed projects? In this article, Jeremy Barrell explores the subtleties of effective tree protection on construction sites, and shares a new approach showing promising signs of success. It seems that a cocktail of back-to-basics and images packaged as concise Site Guidance Notes is improving how site operatives deal with trees, and delivering a much-needed environmental windfall in the planning process.

#### Trends in urban tree canopy cover

I speak at tree conferences around the world and the speakers are invariably upbeat about how well they are doing and what great strides we are making in urban tree canopy cover management. To some extent, that is true when considering the management of publicly owned trees in streets, parks, and municipal properties. However, the reverse is often the case for privately owned trees, where many councils are failing to regulate what happens on private properties and uncontrolled development is destroying urban canopy cover faster than it is being replaced. Supporters of unregulated development often cry 'foul', saying if profit really is trumping sustainability, where is the evidence?

In 2008 <sup>1</sup>, I raised the alarm that, slowly but surely, UK urban canopy cover was declining without anyone realising the scale because it was scattered, which was hiding the cumulative impact. Of course, this was just my suspicion based on anecdotal evidence, and there was no formal research to prove it either way. A decade later, American research confirmed that urban tree canopy cover is declining generally across the USA <sup>2</sup>, and specifically in Denver and Milwaukee <sup>3</sup>, although we still only have limited research validation that the trend is similar in the UK. This evidence should be a wakeup call for everyone; our urban tree canopy cover efforts are nothing like as effective as we are being told and yet politicians are still failing to grasp the urgent need for effective planning controls.

From the UK perspective, as the evidence mounted showing a net loss of urban trees, my attention as a practitioner was directed towards understanding why it was happening and what could be done about it. During the last ten years, I have written about the multiple reasons for tree loss including arborists prematurely condemning trees over safety concerns <sup>4</sup>, a presumption by highway managers not to replace felled trees <sup>5,6</sup>, poor planting practices resulting in high new tree failure rates<sup>7</sup>, a reluctance to factor tree value into built environment decision-

making<sup>8</sup>, and premature felling of healthy street trees to cut costs<sup>9</sup>. However, my dominant perception was that by far the greatest loss occurred on construction sites through inadequate protection of trees identified for retention that subsequently died or were removed.

#### Barriers to successful tree retention

In my quest to find a solution, I identified several practical and procedural barriers to successful tree retention:

- Communication breakdown: There is often poor communication between the planning and implementation stages of the development process, so it is common for the site operatives to be unaware of tree protection agreed with planners.
- British Standard (BS) guidance<sup>10</sup>: The BS guidance is copyrighted, which prevents its detail being easily reproduced to explain specific operations.
- Weak planning conditions: Poorly informed/inexperienced planners often write weak planning conditions, and so agreed tree protection cannot be enforced as intended.
- Formal reports: Although detailed reports are an essential part
  of describing a development proposal in the design and planning
  stage, once consent is issued, those reports are rarely found or
  used on site, i.e. site operatives meant to implement tree protection
  do not have easy access to information on how to do it.
- Report aversion: People on site are not engaged by complex or lengthy reports, which results in key personnel not understanding how to properly protect retained trees.
- Ineffective enforcement: Local planning authorities (LPAs) often struggle to enforce detailed tree protection requirements that are not clearly explained in the planning application documents.

On the bright side, I found that plans are a universally understood medium on site and their use is routine, so important information on plans has a better chance of being used than if it is buried in a report.

#### Evolution of the Site Guidance Note (SGN) concept

To make a real difference on tree survival, within our business we wanted to develop a solution to bridge the procedural gap between planning and implementation, i.e. assist the operatives doing the building to understand the tree protection proposals and how to execute them on site. Our early efforts focused around including the detail of site operations within our impact appraisal reports submitted with planning applications, but this resulted in lengthy documents making it difficult to pinpoint specific information. Although this approach



Figure 1: There are 12 individual Site guidance Notes covering all aspects of protecting trees during construction.



Figure 2: QR Code links on the tree protection plan allow operatives to download relevant SGNs to their mobile devices, so no more excuses for not having access to the information!

contained all the technical information, it drew regular criticism from L PAs as being too complex, generic, and not site specific. Our subsequent evolution illustrated the technical content with photographs of real examples from our thousands of projects, which was more effective at explaining, but still resulted in long reports, so was only partially successful. The report size issue was solved by the advent of improved internet storage of information and access to it. We took our lead from the UK government approach to storing generic guidance for planning online; if that was acceptable for government administration, then why not for tree protection as well?

Through this lengthy process of trial and error, the design priorities began to emerge to shape the concept of the SGN. Reports could be kept short and site specific by extracting and storing generic information online. That information needed to explain the principles of each individual tree protection operation in a way that made it easy for site operatives to understand and access. There needed to be a summary of the technical support references to add the necessary depth of detail and credibility. Photographs of tree protection operations were preferred to text explanations. Finally, the overview and detail of how to do each tree protection operation should be quickly and easily accessible through the tree protection plan.

That was the design process, and this is what we came up with. Twelve individual SGNs (Figure 1) covering the commonest tree protection issues, ranging from supervision, to fencing, to excavating in root protection areas. Each SGN starts with a concise bullet point summary of key information that site operatives should know, followed by images showing how it can be done, and concludes with a summary (not verbatim quotes) of the technical guidance. Each SGN can be downloaded free (www.barrelltreecare.co.uk/resources/technical-guidance/) and accessed directly on site using mobile devices to scan the QR Codes (Figure 2) on the tree protection plan.

#### **Using SGNs**

Anyone can access and use each SGN free, but the source must be acknowledged, and their format/content must not be altered. Their multiple benefits include:

- LPAs can link online to SGNs to publicise planning expectations to the public and professionals.
- Consultants can reference SGNs in their planning reports, either linking to the online source, or downloading them and inserting them directly into the report.
- Developers can use SGNs to specify tree protection for pricing and implementation.
- LPA planning officers can directly reference SGNs in planning conditions as a source of credible detail.
- LPA tree officers can use SGNs on site to explain tree protection expectations to developers.
- Site operatives can download SGNs to mobile devices on site as a quick reference when working near trees.
- When it all goes wrong, LPA enforcement officers can reference SGNs as clear examples of what was expected.

In short, SGNs provide a common standard for reasonable tree protection expectations during development.

Although SGNs have evolved in the UK planning system and are intended for use within it, the difficulties they have been designed to overcome apply around the world and there is increasing interest from other countries who have a similar desire to reverse the loss of urban canopy cover. We believe that there is great potential to customize the SGNs concept for use in New Zealand, and that it would be feasible to adapt the detail to suit local circumstances, e.g. using alternative New Zealand case studies with photos, and updating preferred technical references. Indeed, all the hard work has already been done, and the national adoption of SGNs as a practical implementation standard would be a quick and effective means of avoiding reinventing the wheel.



Figure 3 caption: Jeremy Barrell is an author and Managing Director of Barrell Tree Consultancy.

barrelltreecare.co.uk

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Adapted from an article published in the ARBmagazine in June 2018

# TREE OF KNOWLEDGE

### Gear Check

I arrived to check on a contractor's progress with a tree removal. I was drawn immediately to what appeared to be an improvised mechanical advantage system (for tree pulling) lying on the ground beside a felled spar consisting of a collection of climbing equipment, and some gear that could easily be confused as rigging or climbing equipment. A friction saver used as an anchor, a climbing rope reeved through a couple of hitch climber pulleys, a rigging block, two hitch cords, etc. The site supervisor assured me that they didn't have to pull very hard to get the tree over (for what it's worth). I couldn't decide what was the best way to address my concerns because my gut was telling me that what I observed had deeper roots than the decisions of one tree worker. The problem? Climbing components that are configured for rigging tasks without a second thought, and with no consideration for where those components might end up next.

The source(s) of the problem is complex of course, combining:

- A product development curve that has been fast moving and driven by a relatively small group of highly technical gearheads, and competition climbers.
- Manufacturer product training programs that consist of a single international manufacturer's representative presenting short sessions at major conferences and at a handful of workshops world-wide.
- Introduction to products from your buddy who knows lots about gear, from YouTube, or worse.
- An inherent scepticism about gear cost versus benefits by supervisors or owners (who may or may not be familiar with the gear being requested) or a negative perception of how gear purchases might change work productivity.
- A reluctance by climbers to spend money on gear due to the high cost or because the products they know are no longer produced.
- Rushed apprenticeship periods or an inability to pair apprentices to mentors.
- Supervision used rarely and reactively, rather than frequently and proactively.
- A reluctance by supervisors or owners to spend money on gear due to past experiences of equipment abuse, misuse, non-use, or loss.
- An insistence by experienced workers who learned in gearrestrictive environments to pass similar expectations along to new workers
- A lack of understanding of how damage occurs to life supporting equipment
- · Casual attitudes toward risk to self and others
- Omitted equipment incidents or close-call accounts for fear of reprisal
- Company-provided climbing equipment programs that reassign used items (as personnel come and go) without effectively logging entry of service, inspections, or reporting potential events where Safe Working Loads/Working Load Limits have been exceeded.
- The need to do physical work, with knowledge of tools that reduce physical and mental demands on a worker or workers.

Today's fit-for-purpose tree climbing equipment is exceptionally wellbuilt in terms of durability, wear indicators, and safety margins. Cases



Damaged wire core

of equipment failure are less commonly seen in incident statistics, but less common does not mean uncommon. Three of my colleagues have fallen on account of equipment failure – one of whom did not survive. Many experienced climbers who keep themselves current on PPE inspection have direct experience of removing gear from another climber that was down to its literal last threads. These are not gear problems, but gear-user problems (in most cases).

What do we do about it? The first step is examining your own workplace for conditions like those I've just bullet pointed. You could start by picking any tree truck at your workplace and pulling loose gear off it for examination. Tree trucks that have loose, unassigned climbing equipment such as climbing ropes, friction savers, carabiners or micropulleys indicate that there may be a problem. Knowing what you do, do you feel comfortable using those mysterious items based on a visual inspection alone, and is it reasonable to reassign that gear with origins or service history unknown? This is one of the main reasons why I buy my own gear, why I don't lend out my gear unless I am directly participating in the operation, and why I do my absolute best to account for each item after every use and ensure each piece of gear goes to its happy home when work is done. Remembering all the gear you have and when it entered service is no easy feat. Having all your gear recorded on an inventory makes for easy inspections.

The problem? Climbing components configured for rigging without consideration for where they may next end up in use.

# Having all your gear recorded on an inventory makes for easy inspections.



The harder tasks won't be solved in the short term and require those of us in positions of mentoring to think carefully about the values and lessons we're sharing. If you find yourself frustrated by new equipment entering the workplace or how those tools might change how tasks are completed, a bit of money to secure time with professional industry trainers/product experts can help the entire crew learn in a safe setting, improving familiarity, competency and productivity all at once across the workplace. If you find yourself deeply skeptical about the benefits of the latest tech to hit the tree gear showroom, you're not alone. If you're determined to use modern tools as a workplace cultural incompatibility indicator, then you most definitely have your work cut out for you on recruiting and retraining. If you swear it's the last, last last time you'll ever buy an expensive item for a climber because it's been lost yet again, you could consider talking to some of your colleagues in the tree business for other ideas to encourage gear appreciation and accountability. Restricting climbers from using the gear they like to use or need to use will have compounding effects, starting with diminishing morale for the climber and eventually their coworkers (precursors to flight risk, property damage risk, or injury risk). Yes, there are abusers, but amnesty is in unnecessarily short supply considering what those tools deliver in productivity, ergonomics and safety.

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# **HEALTH, SAFETY & WELLBEING**



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# Looking Beyond Catastrophic Risk to Health and Wellbeing Factors

Worksafe recently secured a prosecution against an employer, Bradford Dibble, for failing to keep a worker safe while he was trimming branches next to a powerline.

The worker sustained an electric shock and fell from the metal ladder he was standing on. He broke his shoulder, sustained back injuries and suffered concussion. Mr Dibble was subsequently fined \$65,000, ordered to pay \$20,000 in reparation to the worker, and was sentenced to 60 hours community work on a charge under the Electricity Act 1992.

Like the Stumpmaster case a few years ago, these incidents cause us to immediately concentrate on catastrophic risk (serious harm or death). We then focus on the things we are not doing well and how we can avoid the bad things that could happen. As a result, we tend to prioritise the "urgent" over the "important".

This is not to say that this approach is not warranted. It does, however, keep us in a reactive mindset that is hard to break and from which it is hard to implement meaningful and lasting change.

At last year's Arboriculture Conference, I spoke on Health and Safety leadership and the concept of Safety II, developed by Daniel Hummerdal, a world-leading safety innovator and now Worksafe's Advisor for Health & Safety Innovation. Safety II is about identifying "what is going right" and recognising that people aren't the problem, rather how do we fix the environment for our people to make better health and safety decisions.

It is in this context that I'd like to suggest we prioritise the "important" over the "urgent".

Research and experience have shown that serious incidents often flow from issues involving fatigue, drugs and alcohol, hearing loss and mental ill health. In this article, I will be focusing on the latter two, and how as an industry, we should be addressing these "important" issues as part of a long-term commitment to our people.

The National Foundation for the Deaf Inc. (NFD) and the New Zealand Hearing Industry Association undertook substantial research at the end of 2018 to understand hearing loss in the New Zealand working environment, culminating in the NZ Trak Report.

Over 300,000 New Zealanders aged between 20 and 64 have a hearing loss. Some is genetic, some work-related and some is due to the aging process. 30% of hearing loss is however preventable.

It should come as no surprise that some of the equipment used in our industry operates at 120 decibels or more, which, if there is no hearing protection in place, can cause hearing damage after 30 seconds. We are not a quiet industry, and most of our attention to date has been on isolating or minimising noise, rather than understanding the impacts on our people and how we could engage with our suppliers to build greater health and safety into design.

The NZ Trak Report found that 44% of working age people with hearing loss experience feelings of frustration at work, and a staggering 90% have experienced feelings of depression, isolation or hopelessness at work. Hearing loss should neither be an impediment to gaining work nor being meaningfully engaged in the workplace. Yet, few employers know how to establish an inclusive and engaging environment to assist in the recruitment or retention of people who have, or who develop hearing loss.

To address this, NFD has published a series of information and guidance modules as part of their Hearing Accredited Workplaces Programme. Treescape® has partnered with NFD on this and several other hearing loss education initiatives. We are happy to share our experience to date and would welcome further industry participation to ensure that we protect the hearing of our current and future employees.

There are a number of factors which influence our mental health. In addition to hearing loss, other factors include work, family or financial

pressures, fatigue, or the misuse of drugs or alcohol. The effect is much the same: disengagement and an increase in personal risk or risk to others

BRANZ and Site Safe New Zealand have recently published a report on suicide in New Zealand's Construction Industry Workforce. It is a sobering study based on an analysis of 300 coroner's closed case files of construction workers in New Zealand who died by suicide between 2007 and 2017. While the report provides neither solutions nor frameworks for preventing suicide in New Zealand's construction industry, a number of recommendations that were suggested are of enormous value and relevance to our industry.

From an industry leadership perspective, these include how we focus on influencing the work-related factors identified in the study in ways that minimise or eliminate the risk of mental harm to our people, and how we embrace mental health education initiatives. Further recommendations included adding curriculum relating to mental health in all levels of vocational education and building mental health education into all health and safety training.

Treescape® has increased its EAP assistance to all its people, and delivered mental health first aid training to all management and supervisory staff. We have recently rolled out the same training to front-line employees in our Wellington operations, and will progressively do so throughout the business. The response has been very positive, but we know we still have a long way to go to normalise conversations around mental health and wellbeing.

For businesses looking to do the same, there are excellent resources and information available through the Mental Health Foundation.

These are important issues facing our industry and ones that need to be addressed for the long-term health of our people. While we may compete for customers, there should be no competition when it comes to health and safety. Let's look at what we can do to share our resources and experiences to collectively address these challenges for the future. We'd welcome any feedback or suggestions on how we can achieve that.

James Fletcher is the Chief Executive Officer of Treescape®.

He is a passionate advocate of building strong Health & Safety cultures and deeply understanding risk. Over a 20-year career, he has transformed businesses from compliance-based safety thinking to empowered engagement.

James is the Chair of the Leadership Committee and a Steering Group member of the Business Leaders Health & Safety Forum (www.zeroharm.org.nz), and was a finalist for the Safeguard Health & Safety Executive of the Year awards in 2015 and 2019.

STIHL are Cornerstone Partners of the New Zealand Arboricultural Association (NZ Arb).

STIHL have invested in ensuring Tree Matters readers have a regular Health, Safety & Wellbeing feature in each issue. Content for this page is chosen by the Editor of Tree Matters and administered by NZ Arb's contracted publishers. The authors and articles that appear in this feature are in no way affiliated, endorsed or administered by STIHL.



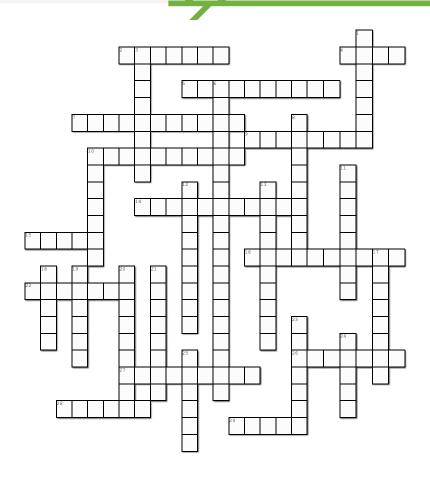
# **CROSSWORD**

#### **Across**

- 2. leaf pores from which water leaves and carbon dioxide enters
- 4. outer protective layer used in passive defense
- 5. the genus 'Fuscospora' was previously named what?
- 7. red leaf pigment which absorbs green light wavelengths
- **9.** the vegetative part of a fungus consisting of a mass of branching, thread-like hyphae
- 10. a generalised plant cell performing many functions
- 14. the green heart of photosynthesis15. usually green part of the flower used for protection for the flower in bud and often as support for the petals when in bloom
- 16. taxonomic order in which the beetles are classified
- 22. the first part of a seedling to emerge from the seed during the process of germination
- 26. passive movement of water and solutes across a partially
- permeable membrane. This is how roots take up water from the soil
- 27. a kind of strip which water must pass 28. photoassimilate conducting tissue
- 29. water conducting tissue

- 1. meristematic tissues allowing for lateral expansion
- 3. balloon-like projections from parenchyma cells into adjacent xylem
- 6. the response by plants to mechanical sensation
- 8. a chain of glucose molecules, often the primary component of plant cell walls
- 10. the stalk that joins a leaf to a stem
- 11. a region of rapidly dividing cells
- 12. a flagellate self motile (swimming) spore of Phytophthora
- 13. big laughing Jim
- 17. the underground primary meristem
- 18. the seeds of a gymnosperm are said to be what?19. an organic polymer responsible for providing structural support to woody vascular plants
- 20. the stalk bearing a flower or fruit, or the main stalk of an inflorescence
- 21. water transport outside the plasma membrane
- 23. growth or turning movement of a plant in response to an
- 24. the model used to describe the way trees deal with dysfunction
- 25. the main axis of a compound leaf bearing multiple leaflets

Answers are on page 47



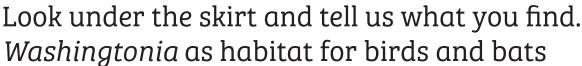
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# IN THE URBAN FOREST



Look under the skirt and tell us what you find. Washingtonia as habitat for birds and bats.

Cultivated in Australia since the 1880s, two North American fan palm species, the Californian Fan Palm (Washingtonia filifera) and the Mexican Fan Palm (Washingtonia robusta) are a common sight in many Australian communities. The palms go under various colloquial names; W. filifera is known as 'sky-duster palm,' 'railway palm,' 'desert fan palm,' 'American cotton palm,' 'petticoat palm' (because of the 'skirt' of dead leaves that cover the stem) and while W. robusta is known as 'Washington palm,' 'Mexican washingtonia,' 'cotton palm' and also 'sky dusters'

As these palms were widely marketed by the horticultural trade they now have a global distribution. A systematic review of the ecological provisioning services provided by these palms has shown that their drupes (fruit) are consumed by a wide range of birds, fruit-bats and terrestrial animals. While coyotes are the main disperser of seed in the palms' original distribution range of Southern California and northern Mexico, many native fauna species in other countries have adapted to feed on the fruit offered by these exotic palms.

Little is known about the animals that feed on the palm's fruits in Australasia. On record are only pied currawong, starlings and blackbirds, as well as fruit bats, but there are bound to be many more bird species that eat the fruit.

Even less is known about what goes on under the 'skirt', the array of dead leaves at the bottom of the crown of both species. These dead leaves persist in particular among W. filifera as well as the hybrid Washingtonia x filifera, unless they are arboriculturally removed for aesthetic reasons or because they pose a fire risk. In the southern USA, a wide range of birds (among them sparrows, owls and parakeets), small bats as well as rats use these leaf thickets as nesting and roosting habitat. In Europe, feral parakeets and rats have likewise colonised these spaces.

In New Zealand nothing is known about what goes on under the 'skirt' of these palms, despite the palms being widespread. Arboriculturalists are uniquely placed to assist, as they are regularly engaged in the pruning and tidying up of these palms. Many will have noted wildlife or evidence of their activities, but not thought it worthwhile to photograph or record them.

We would like to hear from you. Next time you are pruning, or removing, Washingtonia, look under the skirt and tell us what you find.

#### A/Prof Dirk HR Spennemann

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## IN THE URBAN FOREST



# Planning Specimen Tree Planting in Tauranga

Although arboriculture and horticulture are closely overlapping and interdependent industries, I have discovered that a few fundamental differences pose a challenge for successful shared outcomes.

One of the most rewarding aspects of my job has become the ability to make a difference in our environment for generations to come. I look forward to being able to show my son the trees that I have planted, but will the trees that are being planted today be here for my son to enjoy tomorrow?

Nursery workers have many tools available to them for the propagation of healthy trees, but no single one of them can guarantee the establishment or long-term success of those trees. Nursery practice and techniques need to be applied with a greater understanding of general arboricultural principles in order to yield healthy and well-developed long-term tree establishment for our urban environment.

I have observed both good tree-growing practices and bad tree-growing practices first hand. Bad nursery practices have ongoing implications for trees after planting with regard to establishment success, maintenance and safety, whereas a well-developed, healthy, structurally sound specimen can become established quickly and grow on to provide benefits for many years.

I have the privilege of working very closely with a local nursery. My predecessors and colleagues have built a strong working relationship with the horticultural staff and nursery owner, so it was only natural that I too was able to benefit from this great work. Over many years, expectations have been created about what tree stock specifications are required. Only the best, well-developed, healthy and strong species are now received. As a part of our planning, I visit multiple times throughout the year, inspecting commissioned tree stock for this year's planting and next year, as well as young trees that are being grown on, which will be ready in three or more years.

Poor practice sees trees that are often not self-supporting, grown so close together with no room for developing lateral growth or self-supporting strength. A disproportionate stem height to calliper ratio also creates reliance on nursery canes for the stem to remain upright. And of course root-bound stock is another common result.

If the objective of planting a tree is to have successful establishment and growth in our environment, then surely it makes sense to begin with healthy fault-free trees that can flourish in the landscape without excessive maintenance.

The challenges to establish a new landscape tree are many. Transplant shock may occur as a pampered nursery tree transitions from a sheltered, irrigated, and fed situation into an isolated and exposed new home; perhaps a sub-division, a grassy field or a barren street. The trees are then often faced with harsh highly modified environments, poor soils, confined growing spaces and impervious surface intruding into their available root zone. If that is not enough, they may be met by a weedeater, a mower, shovel, or agrichemicals used to kill surrounding grass and weeds. So a good start is needed to ensure they survive and thrive. It is crucial to set a level of expectation for growers to understand what a healthy fit-for-purpose tree is to us.

Australia are about to unveil their national tree stock standard. "The updated standard takes into account the nation's diverse climatic and growing regions. It also reassures buyers that trees are grown to a high standard and can be successfully planted into the landscape once they leave the production nursery." <sup>1</sup> Standards are by no means a new thing, British and American nursery standards have been in use for many years. Perhaps it's worth encouraging New Zealand nursery growers to adopt an existing practice in the absence of our own? Without it, how can we expect a tree to survive unfavourable odds when we can't even start with a fit-for-purpose specimen tree?

I am not a nursery grower, therefore no expert on producing large quantities of quality tree stock. I appreciate the hard work that goes into it, and as an arborist I understand some of the difficulties associated with trees.

As cost is always a consideration, perhaps paying a premium won't seem such a premium if the establishment success rate offsets the cost for less frequent maintenance, removal, and replacement planting?

These are just a few of my thoughts and observations as we enter another planting season.

# Only the best, well-developed, healthy and strong species are now received.

Richie Goldstone; Tauranga City Council Arborist

"A society grows great when old men plant trees whose shade they know they shall never sit in."

Greek proverb

"Nō tātou te haepapa kia tiakina te taiao, hei whakamana i ngā whakareanga o mua, hei oranga anō mō ngā whakareanga ā muri nei – We have a responsibility to care for our environment, to honour past generations and provide for those yet to come."

Maori proverb

 $^{1}$  Mark Tjoeker, Commercial Horticulture magazine, Feb/March 2019



### **Arborist**

We are a progressive electricity distribution business providing high quality services to the Marlborough region.

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Training to work within the competent working zone around live lines will be provided to suitable applicants if necessary.





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## **RISKY BUSINESS**



# The Value in Risk

Of the over 20 or so definitions of risk that exist by far the simplest is; the possibility of losing something of value. In terms of managing risk for health and safety, risk is defined as the likely consequence of a hazard, combined with the likelihood or probability of that hazard occurring. In other words, risk involves the potential of something harmful happening to something of value. So why is risk so complicated?

Value, for starters, has several meanings, it can be applied to different things, in different ways and different people may apply different values to the same things. So, to determine the extent of risk based on the value of the thing alone is not correct. Harm can still happen to something that has no value.

To determine the extent of risk based on the amount of harm (or consequences) is also not correct. It would be fair to say that death and/or complete obliteration could be viewed as harmful, but if the cause of that harm is never going to occur, then there is no risk.

So to determine risk we need to consider two components

i. the potential loss (the value of the thing), and

ii. the probability that the loss will occur (will harm happening to the thing).

For harm to occur to the thing, the thing and the event that causes the harm need to coincide. Determining if that can actually happen is where risk gets really complicated – enter the domain of the risk manager and the concept of 'perceived risk'.

By definition, to perceive something is to come to an opinion or have a belief about something. Perceived risk, therefore is a belief or opinion that an event may happen and when it happens it will cause harm to a thing. What we can take from this, is that risk management is personal; risk management involves the risk manager's opinion... their opinion on the value of the thing, their belief of a harm event occurring, their perception that the event and harm will coincide and... their belief of what will happen if they make a bad management decision - after all, it is a risky business being a risk manager.

When it comes to risk assessing trees, most arborists focus on the tree and most risk managers focus on the thing of value. If the arborist values the tree more than the thing that the manager fears will be harmed, then the risk assessment is off to a bad start. If the arborist and manager have a different belief or opinion about the likelihood of the event happening (i.e. a tree or tree part failing) then the risk assessment doesn't get much better. Communicating risk at that point becomes less about the tree and more about managing or at least understanding the beliefs and opinions of others.

So where do you start? Consider starting with where value truly lies. As far as I can tell, most risk managers, tree owners and/or clients believe that they are liable for all and any harm (or damage) caused by their trees. And, at the risk of generalising... most risk managers, tree owners and/or clients don't understand the law in relation to liable.

Liability is the state of being legally responsible for something. In general terms there is 'Liability' and 'Strict Liability'. Most people fear and think Strict Liability where in reality, or strictly speaking... they are most likely in a liability situation.

Strict Liability is liability which does not depend on actual negligence or finding fault. In Strict Liability you are in full control, therefore, you are responsible for any harm or damage, end of the story. But if you are not in full control (i.e. if you manage a naturally grown tree exposed to the full force of the weather) and a harm event happens, then there is a reasonable chance that it may not be your fault.

The key word there is 'reasonable'. There is a reasonable chance that it is not your fault if you are paying reasonable care and attention and you are taking reasonable steps to manage the risk. If you are not, it could be said that you are negligent. Negligence is defined as the lack of reasonable care and attention, a breach of a duty of care which results in damage. So if a risk manager, tree owner and/or client gets a suitably qualified arborist in to assess their tree(s) then they are taking steps to manage their duty of care. Depending on what is said and/or what is done with that information, the tree manager, tree owner and/or client may not be responsible for any harm or damage caused even if a tree or tree part fails.

To manage my risk I will point out that I'm not a lawyer, and you cannot and should not think that you have adequately managed your duty of care by taking legal advice from an arborist.

So why is Risk so complicated? The answer to that is; it is not – but managing risk can be. As an arborist, your job is to assess the risk the tree or tree part poses on a given thing. By getting a suitably qualified arborist in to assess their tree(s) the risk manager, tree owner and/or client is taking steps to manage their duty of care – during your time with them, try to work out what they actually care about; is it the thing of value or is it their liability? I don't think you will be surprised by the answer



















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Peter Anderson says his business has been transformed by their Avant Loader.

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# **EGLENBROOK** MACHINERY



# **INDUSTRY NEWS**

# Hackfalls Arb Camp

Lach year, Mark Randall from ArborCare Tree Company in Gisborne, and Andreas Ross (Rossy) from ProClimb in Auckland organise and run the Hackfalls Arb Camp. Richard Tregoweth from TreeTools provides support and a look at the latest gear as well as throwing in some prizes. The recent event held this May was the 8th year running for this initiative, and was another incredible success for the arb community.

Located in Tiniroto near Gisborne, Hackfalls Arboretum spreads over 50 hectares and is home to over 3000 rare species and varieties of oaks, alders, cherries, magnolias, maples and more. The collection of evergreen and semi-evergreen Mexican oak species is considered the largest private collection of oaks in the southern hemisphere. Bob Berry is the founder of the arboretum and has hand-selected this collection of trees from around the globe. To support to the local Gisborne community, and arb community, we offer our time and skills to help retain this national treasure.

Arb Camp aims to bring together arborists from across New Zealand to learn new techniques and methods while exploring the many exotic tree species Hackfalls Arboretum has to offer. The camp provides a great learning opportunity for young and experienced arborists alike. In NZ, pruning such exotic trees is rare, so learning and utilising techniques that retain the trees may develop a different approach to tree care. This experience also creates a valuable opportunity to jointly identify tree problems and explore best options for the trees. The tree care and pruning carried out on site is monitored with each year's

camp, so teams can see the effects directly. This approach creates open discussions and ongoing learning opportunities which each arborist takes back to their respective business, contributing to the ongoing development of the arborist community as a whole.

Many of the trees at the arboretum have not been modified much since planting, and being from other countries of origin, they may demonstrate differing growth patterns as a result of local acclimatisation. In 2017 Arb Camp dealt with snow damage, which required pruning to the outer canopy of many trees to reduce weight and remove damaged limbs that had failed under the weight of the snow. This was another great opportunity to put technique into practice, and to share skills brought to the camp by arborists from across the country.

The success of Arb Camp sits solely with the purpose of the camp; to develop the industry as a whole. It's about bringing the community together to learn and improve on the overall skillset of NZ arborists. Mark and Rossy have been the pioneers of this camp for several years, and are now looking to develop a succession plan by bringing more people into the management side to ensure its ongoing success. This year, some keen young arborists have put their hands up to help and are looking to run another camp at Hackfalls, possibly to be held later in the year.













Winter 2019 Tree Matters 25

# Auckland's Urban Ngahere (Forest) Strategy is Released

A uckland has a wonderful collection of trees on public and private land and there is an increasing need for us to work harder to preserve, nurture and protect larger trees because they provide us with the greatest benefits. As a part of the team that produced the strategy document I have learned a lot about the importance of taking the time to ensure detailed science and research enables the development of material that is accurate, informative and well presented. In addition, I have also experienced the democratic process with locally elected members, councilors and the committee process that enables the council to adopt a new strategy.

The strategy was presented to the Auckland Council Environment Committee on three separate occasions and through this process the 18 key objectives were endorsed along with five key objectives intended to help deliver on the long-term goal of increasing the overall tree canopy cover in Auckland from 18.9% (averaged across the region) to 30% in the urban and future urban areas of the region.

The work program to develop the strategy and subsequent published document was led by John Mauro, Auckland Council's Chief Sustainability Officer, and Mace Ward, the Parks Sport & Recreation Manager.

He whakatupu ngatahi I te ngarere ā-tāone o Tāmaki Makarau e matomato ai te hua a nga rat u mai nei

Together, growing Auckland's urban ngahere for a flourishing future

The Auckland Council Urban Ngahere (Forest) Strategy was released to the public on the 27th of March 2019. The result of three years of work by a team of experts from the Strategy (Sietse), Sustainability (Matthew), Biodiversity (Jonathan) and Parks (myself) departments. Our core team led the process of presenting the strategy objectives through workshops to local board members, it was finally endorsed by Auckland Council's Environment Committee in February 2018. The final published document is something that I am very proud of contributing to, with hours of research and review invested.

The strategy aims to provide a clear guide on the steps that are required for improving the long-term management of our green space assets across the Auckland region. The strategy's te tirohanga whānui - Vision, was developed in collaboration with a number of representatives from the 19 iwi of the Tāmaki Makarau region.

The intensification and urbanisation of more land areas is planned across the Auckland region over the next 30 years and all of this adds pressures on the tree cover. So to plan for this change and to cater for future new growth the urban forest strategy sets out key objectives; to know, grow and protect the

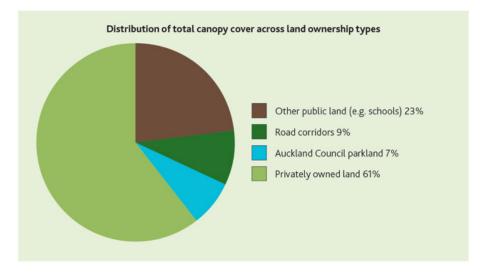
urban ngahere. It aims to use engagement and management as two key action directives and is designed to make use of infographics and pictures to help articulate the key messages on the cultural, economic, environmental and social benefits and values that come with a healthy, diverse and resilient urban forest.

The strategy has five key objectives that are aimed at delivering 18 actions across Council departments along with encouraging work with local Mana Whenua, local communities and looking to develop partnerships with volunteer groups and other groups involved in care and restoration work.

The strategy sets a key objective to increase the region's overall tree canopy cover from the current 18.9% average up to 30%; and that no local board has tree cover that is less than 15%. Of concern is that a number of local board areas in Auckland suburbs have tree canopy cover that is as low as 8% where there are significant population concentrations.

Looking internationally, the average canopy cover that most cities aim for is between 30-40% canopy cover. The Auckland region has a tree canopy cover range from 8%-30%, depending on the suburb.

The Urban Forest Strategy highlights the current and future pressures, risks, and challenges that are faced by the urban ngahere; not just from human activity but also pest and disease threats and extremes of weather associated with climate change. If we consider Dutch elm disease alone, we are seeing the removal of hundreds of large trees annually as a result of its continued spread.



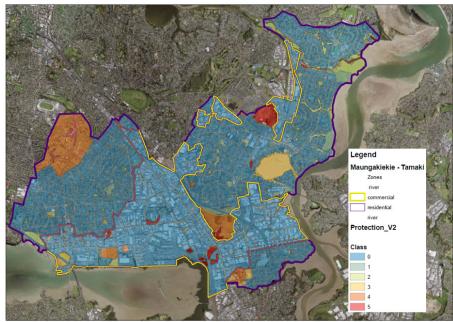
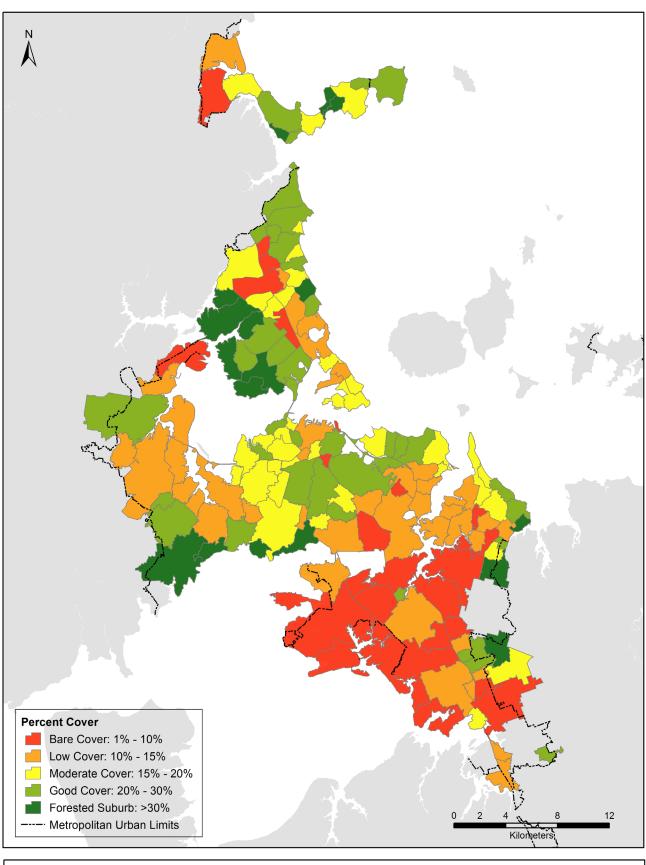


Figure 2





Whilst due care has been taken, Auckland Council gives no warranty as to the accuracy and completeness of any information on this map/plan and accepts no liability for any error, omission or use of the information.

Copyright Auckland Council.

Date: February 2017

Urban Forest Canopy Cover by Suburb Map Produced by Research & Evaluation Unit. Auckland Council



In one local board area an estimated total of 61.23 hectares of tree canopy was lost, amounting to approximately 12,879 tree removal events over a ten-year period. These are concerning figures compounded by the estimation that around 54% of the trees removed did not have a known reason associated with removal. In other words, no known modification or development took place on the land after the trees were removed

Somehow this needs to be addressed to ensure that the tree cover on private land is not lost through poor advice and decisions resulting in loss of perfectly healthy trees.

On average around 60% of the region's tree cover is on privately owned land, and as such the majority of this will have no protections. The concern over time is that the continuing reduction in space on private land puts more and more pressure on large trees that take up space

Figure 2 shows the percentage of trees that have some form of protection in the Tāmaki-Maungakiekie Local Board area. The aerial image shows the extent of the area and the blue overlay demonstrates where protection is lacking. It is of great concern how much of the area has no protection while the large trees remaining have the greatest environmental benefits.

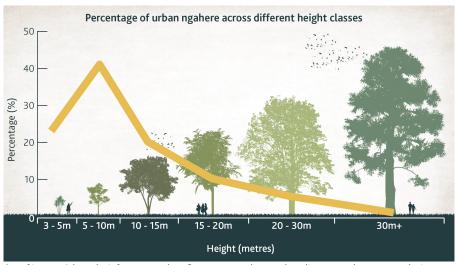
Figures on the changes to tree cover are trending to show that the most losses are for trees over 15 metres in height; there is a growing percentage of tree cover that is no more than ten metres in height. These are early trends but work is ongoing to try to establish how the tree cover of Auckland is changing, monitoring this over time will give

the council valuable information on how it can best focus its efforts to help grow the tree cover in the public domain and to find ways to encourage land owners to realise tree values.

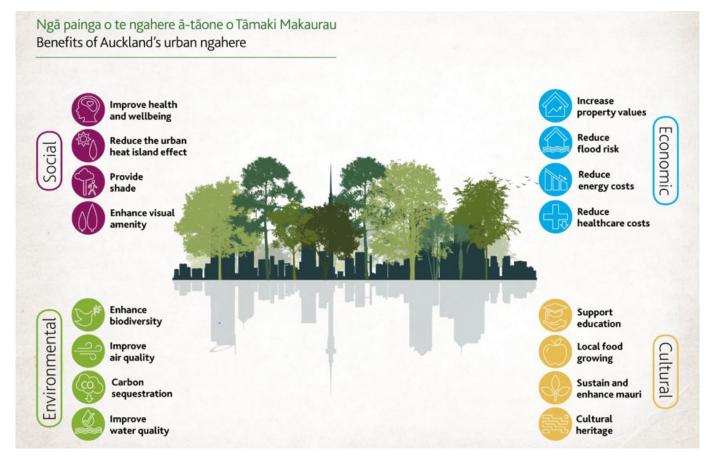
I encourage everyone to take a look at the strategy, available on the Auckland Council website. Science demonstrates to us more and more that trees are a valuable part of our social fabric; they help us maintain good health and wellbeing.

Connecting people to nature is a key step to getting people to appreciate the intrinsic values of trees and we should all take a few minutes every day to promote the message that 'Trees are Good'

# The Auckland region has a tree canopy cover range from 8%-30%, depending on the suburb.



Out of interest I drew the infamous tree benefits curve over the age-class diagram to demonstrate the inverse relationship of tree age and benefits.



# Husqvarna Renew Major Tree Climbing Sponsorship

The New Zealand Arboricultural Association (NZ Arb) is pleased to announce that Husavarna New Zealand will be continuing its sponsorship of NZ Arb as it the Major Tree Climbing partner.

Under the renewed three-year agreement, Husqvarna continues to be the major sponsor of the NZ Arb tree climbing regional competitions and national championship.

Will Melville, NZ Arb President, says the organisation is very pleased to have the ongoing support of an organisation like Husqvarna.

"Husqvarna has been an outstanding supporter of tree climbing in New Zealand," says Melville. "Their partnership over the last ten years has helped us grow the sport of tree climbing in New Zealand significantly."

Husqvarna New Zealand says, "We are truly excited to have extended

our partnership with NZ Arb and the National Tree Climbing Series.

This Agreement allows two like-minded authorities to not only promote a fast-growing sport, but under the careful guidance of both parties, promote professionalism, expertise and safety.

We have created some fantastic long-term friendships during the last eight years, and our association with each other will only continue to strengthen in the future."



# Market your business at the 2019 Conference

Limited sponsorship and trade packages are now available for the 2019 NZ Arb Annual Conference, in association with Asplundh.

Position your company alongside the largest arboriculture event on the New Zealand calendar. Support existing clients, grow brand loyalty, develop product awareness and boost sales by participating as a sponsor or exhibitor.

See the 2019 Sponsor and Exhibitor Prospectus for full details on the Conference website www.nzarbconference.co.nz





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## **INDUSTRY NEWS**



Nominations are now being accepted for the four high profile NZ Arb Awards, to be presented at the Annual NZ Arb Awards Dinner in Napier on 16 November. Nominations close 30 August 2019.

#### 2019 NZ Arb Ronald Flook Award

The Ronald Flook Award is an accolade given to elevate and recognise high standards of practice in Arboriculture, including tree raising, tree health and management, and amenity tree protection or design. The recipient will have demonstrated exceptional management of trees, whether functional or aesthetic in any stage of development.

#### NZ Arb Volunteer of the Year 2019

#### NZ Arb Innovation Award 2019

Acknowledging innovative contribution to arboriculture, including but not limited to equipment, policy, research, technique, and operations. Open to all.

#### NZ Arb Services to Arboriculture Award 2019

Celebrating the contribution and services of one individual to arboriculture in New Zealand.

For more information www.nzarb.org.nz

Email nominations, with an explanation of the reasons for your nomination, to administrator@nzarb.org.nz before 30 August 2019.

# STIHL LTD Sign Cornerstone Agreement to 2020

STIHL LTD have recently signed an agreement with NZ Arb that will see their current Platinum Cornerstone Sponsorship of the association through to the November 2020.

NZ Arb are very pleased to have STIHL's support of the association continue, in particular their enthusiasm and support for improving industry health and safety.



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022 111 3565 info@clarionhsm.co.nz www.clarionhsm.co.nz For a lot of business operators, the current Health and Safety at Work regulations are pretty daunting and something they'd rather not have to deal with.

With 25 years experience in the New Zealand arboricultural industry, I understand the challenges you face and what it takes to operate a successful business.

I also understand the current Workplace Health and Safety rules and how they apply to commercial arboriculture.



## Dominic Williams

Dip. Arb. Dip OHS Graduate member NZISM



# Kiwi kids accepted the challenge to Be With a Tree

This year, for the first time, NZ Arb teamed up with Forest and Bird and Kiwi Conservation Club (KCC) for Be With a Tree 2019. As one of six official challenge partners, NZ Arb supported the campaign encouraging more of young New Zealanders to engage with the trees around them

Over the course of the 10 day event, the campaign received broad attention both online and through affiliated events up and down the country. Through Facebook alone the campaign totalled more than 9,000 engagements. In addition to this, Be With a Tree reached out to

young New Zealanders through web, print, radio, and television. NZ Arb and Wellington City Council ran a 'Climb a Tree – Get One Free' event at Frank Kitts Park Wellington attracting hundreds of local children, to climb a tree and then take one home, thanks to Kererū Discovery.

Be With a Tree 2019 ran from 31 May to 9 June. It was initiated and managed by Forest and Bird's Kiwi Conservation Club, and was supported this year by NZ Arb, Enviroschools, Wellington City Council, and Garden to Table.



Be With a Tree 2019's ten tree challenges



Treetech's Woody featured in the Be With a Tree week online campaign encouraging young New Zealander's to vote for their Hero Tree



Poppy (8) at a Be With a Tree planting day on Manuka Island near Nelson



Merekara (7) from Mornington at the WCC and NZ Arb 'Climb a Tree – Get one Free' event



# Post-Event Report for New Zealand Arboricultural Association (NZ Arb)

ASIA-PACIFIC TREE CLIMBING CHAMPIONSHIP (APTCC) 2019





It has been seven years since APTCC was last held in New Zealand, and the feeling across the New Zealand climbing community was that everyone wanted Christchurch 2019 to be an event to remember for everyone involved. Over the course of the last 12 months many hours of toil have been invested by many people to turn that vision into that event.

With the support and guidance of the International Society of Arboriculture (ISA) and New Zealand Arboricultural Association (NZ Arb), plus many sponsors, supporters and volunteers, the result was an event the New Zealand industry community was immensely proud to share with their international peers.

In addition to strengthening the networks across the Asia-Pacific community, APTCC 2019 leaves behind a legacy in its host community of increased education and engagement with their trees and the importance of professional care.

On behalf of the APTCC 2019 Operations Committee, a huge thank you goes out to Husqvarna as title sponsor, as well as all the other generous sponsor, the exhibitors and every individual that volunteered their time and experience to APTCC 2019.

I hope you enjoy this reflection on APTCC 2019 and feel as proud to be part of it as I did.

With thanks and regards,

**David James** 

**APTCC Ops Committee Chair** 

# A WEEKEND TO REMEMBER

Enthusiasm and anticipation for the 2019 Asia-Pacific Tree Climbing Championship began building from the moment Christchurch was announced as the host venue, back in Hong Kong 2017, and did not stop until the last element of the busy APTCC programme drew to a close.

In this time, much careful planning, scheduling, promotion went into both the competition and the supporting education, trade, public outreach and entertainment elements of the event.

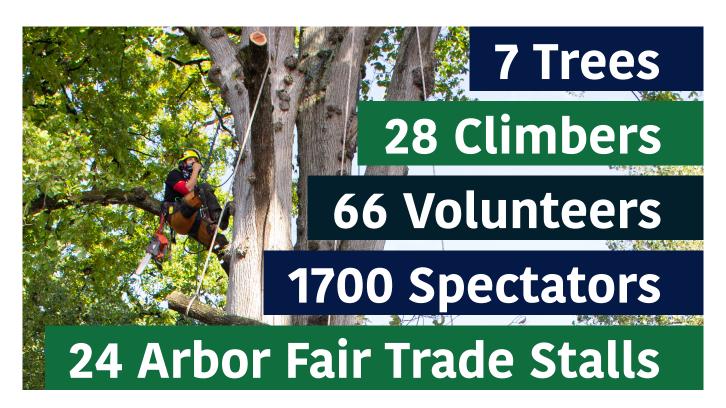
In the months leading up to the event a marketing campaign was implemented to maximise awareness and attendance from both the industry and the general public of Christchurch. This included a high-profile radio and media campaign, chainsaw and outdoor powertool giveaways, billboards and bill stickers wallpapering the city, promotion in local schools and training organisations, and an enthusiastic response from the industry that produced 2.5 volunteers for every APTCC competitor wanting to get involved!

Emphasis was placed on building a strong Arbor Fair around the event for both industry and the general public.

Further enhancing the experience, alongside the APTCC climbing action was an education programme for both climbers (workshops and educational networking event) and the public.

The resulting APTCC was touted a number of seasoned international industry visitors as the 'best APTCC ever', and whilst cooler weather and a general cautious local mood following the mosque-shooting tragedies, were anticipated to impact attendance from the general public, organisers and participants alike were delighted to see queues at both Kids Climb events and a steady number of non-industry visitors enjoying the Arbor Fair and APTCC tree climbing action over the two days of the event.

None of this would've been possible without the support of the ISA, NZ Arb, sponsors, and the industry.

























#### Delivering on Strategic Goals and Objectives

Understanding APTCC's fit with the strategic goals of ISA was key to ensuring planning and management would deliver the best possible outcomes to the community ISA represents. In doing so, APTCC 2019:

- Provided educational opportunities for arborists
- Created an environment that allowed for interaction between ISA members and other industry stakeholders, such as equipment manufacturers, suppliers, trainers, researchers, business owners, and field personnel in order to increase worker safety and training
- Applied judging and judging criteria established from industry best practices and safety standards within a competitive environment
- Introduced any new techniques and equipment in a controlled, safe environment for review by a qualified judging panel composed of industry experts
- Encouraged the use of industry safety standards and best practices to improve safety within the arborist community
- Provided public education about the industry and positive public exposure for the profession
- Demonstrated safe practice showing that tree care professionals have the required knowledge, training, and expertise to preform tree care safely
- Combined the elements of a tree climbing championship competition and public and professional outreach with ISA member benefits, educational development, and industry networking to create a skilled and safer arboriculture workforce.
- Provided an opportunity for engagement and coordinated effort between the ISA, Host Chapter, the competition operations committee, and other organisations interested in participating with the event
- Provided networking opportunities for people interested in the field of arboriculture to physically network, create relationships, exchange ideas, and discuss alternative approaches
- **Provided opportunities for public education** on the benefit of trees, and the benefit of hiring certified arborists **through the Arbor Fair**
- Provided an environment for industry representatives to gain brand and service exposure to professional tree care workers and the public while also engaging the public, through the Arbor Expo
- Provided opportunities for professional education materials that will improve safety and the adoption of best practices
- Engaged professional arborists in a competition of events focused on safety standards and the use of best practices used in real-life application.

#### **Community Engagement**

APTCC was an event that fitted well with CCC's Strategic themes of Stronger Communities, Liveable City, Healthy environment, and Prosperous Economy, and the <u>17 outcomes</u> under those themes.

Over the two days of APTCC the event saw approximately 1,700 visitors. The Arbor Fair was an outdoor expo designed to entertain, engage and educate the local community on a range of topics based around enjoying, appreciating and caring for trees and the natural environment. Arbor Fair exhibitors filled thirty 3x3m sites at the Botanic Gardens, included market stalls, public education booths, and free activities.

NZ Arb managed an 'Ask an Arborist' tent, where members of the Christchurch community were able to talk to a qualified arborist and ask them questions about tree care. *Trees for Canterbury* provided 200 free shrubs to the event to be given out at the 'Ask an Arborist' tent.

Young people were also able to discuss arboriculture as a career option and find out for a working arborist about the job, career pathways and training options in New Zealand. Information about APTCC was disseminated through local high schools through careers advisors and senior management. At a time when the arboriculture industry is experiencing a severe skills shortage, encouraging more young people into the industry can only benefit Christchurch in future years.

Family friendly activities made up an important part of the 'Arbor Fair', including the popular 'Kids climb'. The 'Kids climb' has a huge family appeal and experienced a steady queue of children and families waiting to participate throughout the two days of the event. Children are harnessed and helmeted and belayed up the tree as far as they were comfortable. A second 'Kids climb' event was run to spread the demand where children were harnessed and helmeted and able to walk around logs circumnutating a tree and experience the sensation of being supported in a harness close to the ground. Information about the event, with a focus on the family friendly activities and learning opportunities

was disseminated through all Canterbury primary and intermediate schools.

APTCC 2019 as an event was able to help 'people feel a connection with, and responsibility towards the natural environment'. The first step in helping people connected to a city's green spaces is getting people to visit them and the support that CCC provided to APTCC enabled the event to provide a reason for 1,700 people to visit and engage with the gardens and CCC's green assets.

On one level, APTCC 2019 enabled 1,700 visitors to have an great day out , see some of the world's best tree climbers in action, visit the Arbor Fair and enjoy the Botanic Gardens in Autumn, but on a deeper level a number of those event visitors will have left with some degree of new knowledge and interest their natural environment and its care. In terms of legacy, even an incremental positive move in this direction can provide a basis on which a greater sense of responsibility can grow and return on investment for Christchurch as a city.

Beyond the public benefit of the APTCC 2019, the event had a role to play in encouraging local talent to 'emerge and thrive'. For local arborists to be able to attend APTCC 2019 and see world-class climber in their 'own backyard' was a once in a lifetime opportunity, for current arborists and 'up and coming' local talent. APTCC supported this by inviting local arboriculture businesses to the opening function on the Friday night. Councillor Clearwater was the only CCC representative to able to accept the invitation to attend this event and experience the industry networks and opportunities for local arborists first-hand. His presence was appreciated and acknowledged by our out-of-town visitors.

Local arborists also received the opportunity to attend industry education events at no charge. Industry experts from as far as Italy were able to provide professional development opportunities for local arborists, an experience that will no doubt benefit the city in terms of the knowledge imparted though these workshops.

#### **Event Budget**

A budget for APTCC 2019 was developed by APTCC Operations Committee, in conjunction with ISA and NZ Arb. The budget provided for operating expenses including permits, usage fees, amenity rentals, food for volunteers and competitors, prizes, reimbursements to volunteers, and other approved expenses related to the facilitation of the event. Revenue was primarily be sourced from sponsors, exhibitors, trade stand holders, and competitor registration fees.

As the host chapter, NZ Arb managed all the fiscal transactions for the event, created and managed

invoices for sponsorship and exhibition, and managed supplier payments, costs and prize money.

With APTCC 2019 now complete, NZ Arb will share the final event profit and loss details to ISA and is expecting to be in a position to transfer a small profit to ISA. As agreed in the APTCC 2019 Memorandum of Understanding, once all event expenses are paid, including committee and competitor reimbursements, ISA will return 50% of any remaining revenue to NZ Arb as the host chapter.

#### **Volunteers**

Very few sporting events could boast a ratio of 2.5 volunteers to every competitor. APTCC 2019 had a total of 66 volunteers from seven different countries involved in various aspects of the event.

Recruitment of volunteers was a collaborative effort between ISA, NZ Arb and the other chapters within the Asia-Pacific region. Registration was handled by ISA, aside from a few local late-comers

For the volunteers involved, being part of the APTCC 2019 'team' provided opportunities to build and develop an international arborist network, and exchange ideas.

#### Media

APTCC 2019 as an international event for the Asia-Pacific region attracted media attention accordingly. It was reported widely throughout arboriculture publications and platforms globally.

As anticipated however, locally the sporting and human-interest angles attracted the attention of domestic mainstream media.



#### **Waste Management**

- Organisers engaged with waste management provider and venue to make appropriate waste streams available to event visitors.
- ✓ Total Waste Solutions were contracted as waste management suppliers for APTCC 2019 and arrangements were made with the venu
- Packaging and event consumables were recycled or reused wherever possible.
- ✓ All suppliers such as the onsite caterers The Good Food Company were asked to utilise reusable, recyclable, or biodegradable products wherever possible, and were found to be extremely obliging.

#### **General Waste**

In total eight bins were hired from Total Waste Solutions for the event. These bins were not emptied at all during the event and our Waste Management Volunteer reported none were not full on Sunday 7 April, at the conclusion of the event. All eight bins were collected by Total Waste Solutions on the Monday morning.

#### Recycling

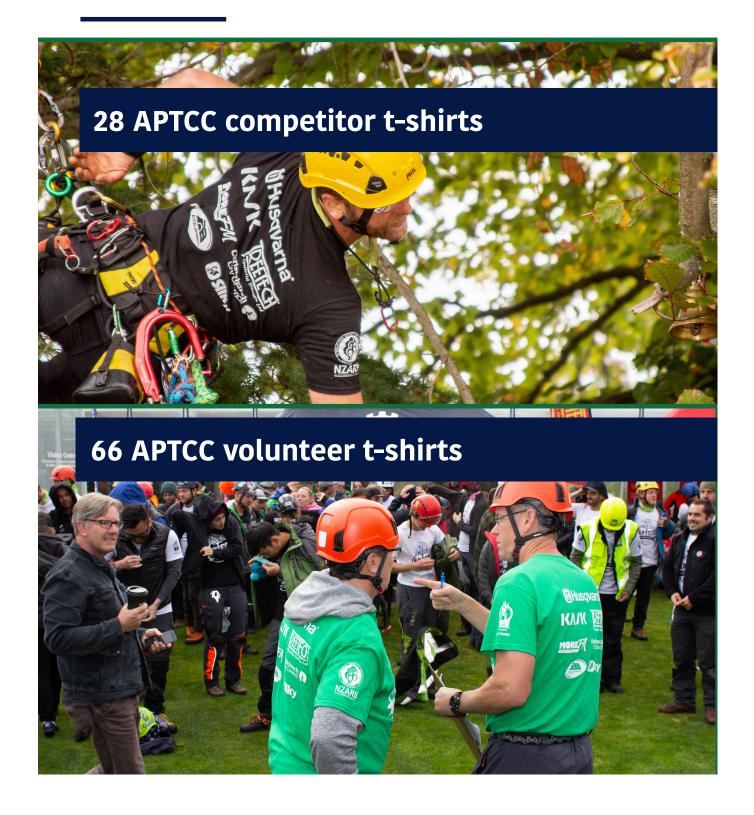
As with many events much of the waste generated in organising the event is cardboard that essential event material was freighted to Christchurch in. As much of this as possible was reused for return freight at the conclusion event. Leftover cardboard was flattened and placed into the cardboard only recycling skip provided by the Botanic Garden.

# APTCC 2019 PROMOTING ARBORICULTIRE EXCELLENCE

APTCC provided an opportunity to promote arboriculture excellence to both the industry and to the general public. To the industry, by way of professionalism, best practices, education and safety standards, and the general public through engagement and education of the importance of trees and using an appropriately qualified arborist.



# YOU'VE GOT OUR BACKS



### **PROMOTING APTCC 2019**

#### Web Presence



#### Phantom Billboards





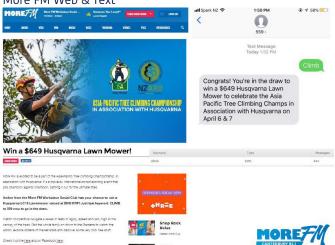






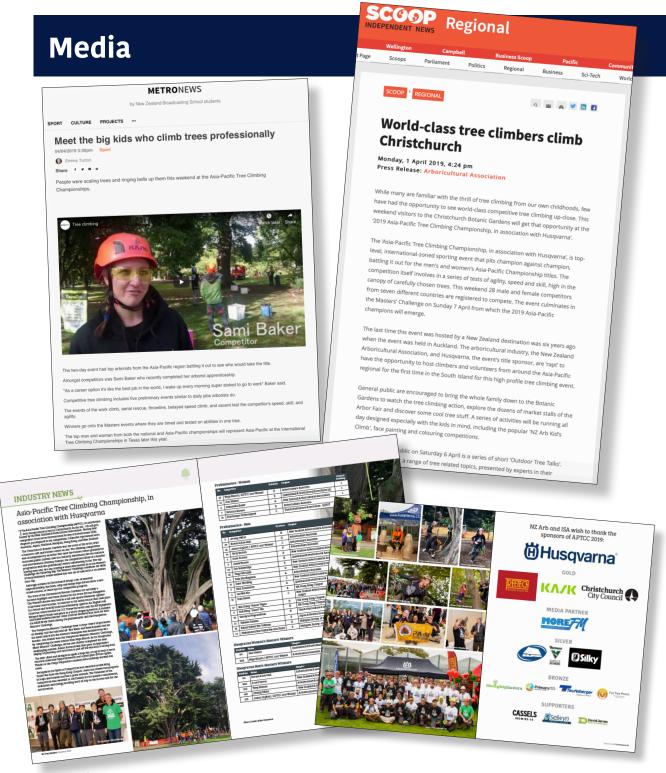






Christchurch City Council Billboards







News Talk ZB interview with David James, Chair APTCC, 2 April 2019







On behalf of the APTCC 2019 Operations Committee, the New Zealand Arboricultural Association (NZ Arb) and the International Society of Arboriculture (ISA) we would like to acknowledge the significant role members of NZ Arb played in making this event through your investment, support and participation.













#### NZ Arb and ISA wish to thank the sponsors of APTCC 2019:



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**MEDIA PARTNER** 



#### **SILVER**







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#### **SUPPORTERS**







#### Almac makes tracks to YRCO

I talian quality Almac tracked access equipment is a welcome addition to our range of access equipment. With constant research into new technologies and new functions these innovative high performance machines are a step ahead.

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There are three different crawler and tracked models in the range . Among these we find the bilevel system, a technology that allows Almac machines to operate on non-level terrains and in particular situations.

For more information about Almac Tracked Access Equipment contact Youngman Richardson & Co Ltd 09 443 2436 or for South Island enquiries, 03 341 6923.









Matukutūreia

**Howell Davies** 

McLaughlin's Mountain (Auckland) - one of two volcanic cones making up Ngā Matuku-rua.

In centre left [of figure 1] – it is a site of cultural significance to mana whenua and it abuts an area of significant conservation, heritage and amenity values (Puhinui Reserve), and is alongside the Manukau Harbour. It is close to Auckland Airport and is 73 metres above sea level.



#### Call for Volunteers

#### 2019 NZARB HUSOVARNA TREE CLIMBING COMP SERIES

To be part of the NZ Arb Husqvarna Tree Climbing Competition Series is to be part of a long history of great competitions run by an amazing team of industry volunteers. We're now recruiting volunteers, new and regulars, for the following comps and/or set-up days:

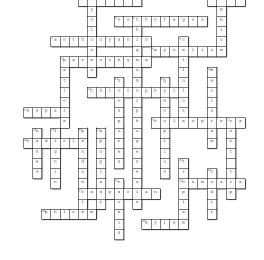
#### **South Island**

17 Aug NZ Arb Husqvarna South Island Tree Climbing Competition, Hagley Park, Chch  $\bf Auckland$ 

28 - 29 Sept NZ Arb Husqvarna Auckland Tree Climbing Competition, Monte Cecilia Park **Waikato/BoP** 

12 Oct NZ Arb Husqvarna Waikato/BOP Tree Climbing Competition, venue tbc  ${f Nationals}$ 

15 - 16 Nov NZ Arb Husqvarna National Tree Climbing Championship, Anderson Park, Napier Whether you have a little bit of time or a lot, there is a role for you at a Tree Climbing comp near you.



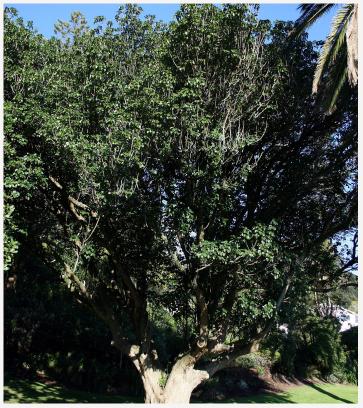


## APPROVED CONTRACTORS OF THE NEW ZEALAND ARBORICULTURE ASSOCIATION

An Approved Contractor is an arboricultural contracting business that has met, and maintains, a minimum stand of professional knowledge and practical ability with a certain level of client service – as required in the NZ Arb Approved Contractor Programme.

Northland/Auckland			
Treescape®Ltd	Auckland	info@treescape.co.nz	(09) 259 0572
Treescape® Ltd	Kumeu	northern@treescape.co.nz	(09) 412 5017
Treesafe Arboriculture contractors	Auckland	nick@treesafe.co.nz	0800 873 3769
Waikato / Bay of Plenty			
Treescape® Ltd	Hamilton	waikato@treescape.co.nz	(07) 857 0280
Arbor Care Ltd	Tauranga	info@arborcare.co.nz	(07) 543 1775
Central / Wellington			
Bark Ltd	Wellington	enquiries@bark.co.nz	0800 227 558
Treetech Ltd	Wellington	office@treetech.co.nz	0800 873 378
Treescape® Ltd	Wellington	central@treescape.co.nz	(04) 569 5813
Arb Innovations	Wellington	enquiries@arbinnovations.co.nz	(04) 2126 366
Wellington City Council Parks & Gardens	Wellington	william.melville@wcc.govt.nz	(04) 499-4444
Canterbury			
Treetech Ltd	Christchurch	office@treetech.co.nz	0800 873 378
Treescape® Ltd	Christchurch	canterbury@treescape.co.nz	(03) 544 0588
Nelson/Tasman			
Treescape® Ltd	Nelson	south@treescape.co.nz	(03) 544 0588

For more information on ACP, or to check latest 'Notification of Intent' companies, visit the NZ Arb website **www.nzarb.org.nz** 



By Kahuroa - Own work, Public Domain, https://commons.wikimedia.org/w/index.php?curid=2427373

WHAT AM I? - ANSWER Pūriri – Vitex lucens

#### **UPCOMING EVENTS**

NZ ARB HUSQVARNA SOUTH ISLAND TCC 17 AUG 2019 / CHRISTCHURCH

NZ ARB HUSQVARNA AUCKLAND TCC

27 - 28 SEPT 2019 / AUCKLAND

NZ ARB HUSQVARNA WAIKATŌ/BoP TCC

12 OCT 2019 / VENUE TBC

**2019 NZ ARB AGM** 

14 NOV 2019 / NAPIER CONFERENCE CENTRE

**2019 NZ ARB ANNUAL CONFERENCE** 

14 - 16 NOV 2019 / NAPIER CONFERENCE CENTRE

NZ ARB HUSQVARNA NATIONAL TREE CLIMBING CHAMPIONSHIP

15 - 16 NOV 2019 / NAPIER

NZ ARB 2019 NEW ARBORIST OF THE YEAR COMPETITION

16 NOV 2019 / ANDERSON PARK NAPIER

**NZ ARB AWARDS DINNER** 

16 NOV 2019 / NAPIER CONFERENCE CENTRE



Not only is Vermeer Environmental Equipment built for performance and easy maintenance, it's also designed with operator safety in mind. Vermeer Stump Grinders make short work out of stump removal and are easy to use on virtually any type of hardwood. From parks to backyards Vermeer Brush Chippers offer a rugged and dependable solution and its exclusive patented safety systems provide less downtime and greater productivity.

Vermeer National Sales Manager: Chris Smith 021 367 889

**Veremeer NI Territory Manager:** David Stewart **027 564 2405** 

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AUCKLAND
Colin Saunders 027 593 2661

HAMILTON
Tony Hennessy 027 839 8153

HASTINGS

Ben Kendrick **021** 658 554

TAUPO

Steve Mellar **027 565 3956** 

MT MAUNGANUI

André Muller **027 550 1729** 

PALMERSTON NORTH Richard Walker 0275 553 9216 WELLINGTON

Mardi Pritchard 021 335 873

NELSON

Chris Jones **0275 741 712** 

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