

SAFETY PLAN WILL RESHAPE INDUSTRY

CHANGES RECOMMENDED BY THE INDEPENDENT FOREST SAFETY REVIEW PANEL, COMBINED WITH INITIATIVES ALREADY UNDERWAY, WILL MAKE THE INDUSTRY A SAFE, PROFESSIONAL AND SUSTAINABLE PLACE TO WORK.

The panel presented its report to a meeting of forest owners, contractors, workers and other stakeholders in Rotorua on 31 October. It contains practical recommendations it says are needed to bring about long-term change to the industry's safety culture and practices.

"There is a strong 'can-do' culture on the forest block. This needs to change to a 'can-do safely' culture," with change led by forest owners, managers, crew bosses and others in positions of leadership.

The panel says safe working practices must become conditions of contracts right along the supply-chain: between worker and forest contractor, contractor and forest owner, forest owner and log buyer.

It envisages a world in which forest owners insist on using accredited contractors. Where safety-critical work can only be carried out by workers who have been trained and regularly assessed. An industry where forestry workers are respected tradespeople, rewarded for maintaining high levels of safety.

The sponsors of the panel – the Forest

Owners Association (FOA), Farm Forestry Association (FFA) and Forest Industry Contractors Association (FICA) – told the meeting they accept the broad thrust of the panel's recommendations, which are expected to be fully implemented by 2017. However, the precise detail of the changes and how they will be rolled out will not be decided until the sponsors have consulted with their members.

At the heart of the panel's 132-page report is a call for a fundamental change in thinking from the boardroom to the forest floor, so that safety is given highest priority in operational decision-making. If a job cannot be done safely, the panel argues, it should not be done at all.

"Research shows that where [there is a] low prioritisation of safety in an environment of production pressure then there is a greater likelihood of serious injuries and fatalities."

The review panel members were businessman George Adams, health and safety lawyer Hazel Armstrong and safety expert Mike Cosman. They were appointed



The Independent Safety Review panel: George Adams, Hazel Armstrong and Mike Cosman

IN THIS ISSUE

PAGE 3
Fire-fighting apps



PAGE 4
STIMBR making progress



PAGE 6
New training quals



by the sponsors in January after consulting with the government, Worksafe NZ and the Council of Trade Unions on the terms of reference and candidates for the panel.

This followed a shocking year in New Zealand forests in which 10 workers were killed and 160 suffered lost-time injuries, some of them serious.

"This was totally unacceptable and deeply troubling, especially given the huge commitment that many of our members have put into making our forests safe places to work. It was clear that we needed outside experts to look at all aspects of the industry's safety culture and operations, to identify how we could further improve workplace safety," says FOA president Paul Nicholls.

In the introduction to their report, the panellists said they had been deeply affected by needless injuries and fatalities but were also inspired by some examples of best practice.

"We have met contractors and crews across the sector who do the right thing. They are living examples that it is possible to meet standards and run successful businesses.

"We sincerely believe that with the right motivation and willingness the sector can and indeed, must, do better. People's lives depend on it."

For more details, see the summary of the IFSR panel's report, enclosed with this issue of the Bulletin. The report is also posted on the FOA website.



MAKING THE SAFETY BLUEPRINT A REALITY

DON'T UNDER-ESTIMATE THE CHALLENGE THAT LIES AHEAD OF US AS WE SEEK TO TRANSFORM OUR INDUSTRY INTO A SAFETY SUCCESS STORY.

The Independent Forest Safety Review Panel has praised its sponsors – our association, the FFA and FICA – for having the courage to allow three independent panellists access to our industry. We accept that praise, but let's be honest: business-as-usual was no longer an option.

It is not acceptable for anyone to risk death or severe injury when going about their everyday work. Everyone who works in our forests has a right to return home safely at the end of the day.

This is why the FOA initiated the review and provided 95 per cent of the funding.

In recent months there has been a dramatic fall in the industry's death rate. Some interests have credited this to greater awareness of the need for safe work practice, resulting from publicity generated by the trade union campaign, Worksafe site inspections and the panel hearings.

Would that it was so simple.

Death rates in our forests have always fluctuated from year to year. In part this is because a major incident may result in a near-miss with no harm, injuries or death. In other words, pure chance has a big influence on whether death results from an incident. Statistical 'noise' also plays a part.

For these reasons, a much better measure of safety in our forest workplaces is the lost-time injury rate. This has been slowly declining in recent years but has not dropped suddenly this year and is still much too high.

So what are we going to do about it?

The review panel's recommendations have been accepted in principle by the FOA executive and the boards of the FFA and FICA. Once each of these organisations has had time to digest the findings and discuss them with their members, decisions will need to be made about who takes responsibility for implementing the recommendations.

As part of this decision-making process, we are talking with Worksafe NZ, MBIE and MPI because, as the report recognises, the industry can't do this alone. Standard setting, worker training and retraining, and the accreditation of contractors needs

to be managed and delivered by someone. The who and the how is open for debate. But the big picture will remain intact.

What we do know is that we are now embarking on a journey that will result in major changes in the ways we have been doing things.

As the panel points out, many of these changes will be driven by a need to comply with the new Health & Safety Reform Bill. The Bill imposes health and safety obligations on all people conducting a business, throughout the supply chain.



A great outdoor job
But the working environment needs to be much safer

This means the safety of each worker on the block is the responsibility of the individual worker, the crew boss, the harvest contractor, other sub-contractors, the forest owner and their agent, as well as the log buyer.

By adopting the panel's recommendations we will go a long way toward meeting our obligations under the Bill.

At a business level, we will need to review all our contracts so that safe practice is incentivised ahead of production. We will also need to ensure there is always direct worker participation in safety decision-making, as well as a mechanism for

training and paying for worker safety representatives.

The panel says it has been unable to validate claims that a disproportionately larger number of serious injuries and fatalities are occurring on smaller forest blocks. This will be because it is not the size of the block that influences the incident rate, but the nature of the business that is responsible for harvesting.

The FOA has strong data to show that where harvesting is under corporate control the health and safety incident rate is far lower than on blocks where harvest management is under the control of individuals or small firms. Nearly all corporates in the industry belong to the FOA, who in the main use FICA members to harvest on their behalf.

Collectively the companies involved in these organisations have put huge efforts into driving safety improvements and innovations and the review was intended to build on these. Indeed these efforts are indirectly recognised in the positive case studies cited in the report. It's important to acknowledge this work, because without safety role models and champions it will be very difficult for the industry to achieve the change that's so desperately needed.

At the same time it is disturbing to learn from the panel that some employers have not been complying with employment law or the standards laid down in the Approved Code of Practice. There is no excuse for this.

The FOA executive committee is determined to create a much safer industry. When we have succeeded in this, we will have safety statistics we can be proud of. But just as importantly we can expect to have strong demand from talented young people for employment in an industry that treats them with respect, provides them with great outdoor jobs, and offers them excellent training and clear career pathways.

In other words we will not only be meeting our legal and moral obligations as employers, we will also be creating value in our businesses. Let's get on with it.

FIRE

FIRING UP FITZROY

FOREST OWNERS CAN HOLD THE POWER OF NIWA'S WEATHER SUPERCOMPUTER 'FITZROY' IN THEIR HANDS IN ORDER TO HELP PREVENT AND CONTROL RURAL FIRES.

NIWA and Scion scientists have worked over the past three years to research and set up a new national Fire Weather System (FWSYS) for fire weather information, forecasting changes in wind direction and strength – both of which are crucial when fighting fires – and fire danger conditions throughout the country.

The system accesses real-time information from a denser network of weather stations. This information is then crunched by technology developed by NIWA's climate modellers and meteorologists and the forest fire research team at Scion.

Scion's senior rural fire scientist Grant Pearce has been involved in rural fire research for 20 years. He explains that while information was previously available to fire managers, it had to be obtained from three separate sources that were based on old technology.

"The new system has been set up as a one-stop shop for fire weather information. It's basically a big software package, using a much more powerful computer to pull information from a bigger network of weather stations, resulting in more accurate data."

According to Pearce, the accuracy of fire weather forecasts is significantly improved through the use of the NIWA EcoConnect climate forecasting platform, which has better weather data quality checking and models conditions five kilometres apart – or as close as 1.5 km, if required.

About 200 weather stations, operated by the National Rural Fire Authority (NRFA), Rural Fire Authorities, forestry companies,

regional councils and NIWA, are in the network and Pearce expects that more will be added from other networks in time. These are being upgraded with the latest technology, including new modems, to enable them to be interrogated over the internet by Fitzroy.

At regular intervals the supercomputer uses the computational power of 7000 laptops to crunch data on wind, temperature, humidity and rainfall readings from the stations – along with other information from satellites, ships, weather balloons and so on. This is combined with Scion's latest models of potential fire behaviour to make predictions to help those involved in rural fire prevention and control.

The key thing for Pearce is that the new fire network system is both accurate and flexible; being able to incorporate future developments in science as more is learned about fire in New Zealand vegetation types.

Fire managers and forest owners who have installed the FWSYS software onto their own computers can then tailor it to individual situations, to alert them – even by email or text message to smartphones, if required – if threshold levels have been or are forecast to be breached. Parameters can be set and reset as needed, for example, to warn of extreme weather or fire danger conditions, or to inform the need to move from open to restricted fire seasons as relevant fire danger triggers are met.

"The system is working well and fire managers are pleased with the result," says Pearce.

Chair of the FOA's fire committee Grant Dodson agrees, saying, "It's a great bit of work and a very useful piece of software."

The main advantage of the system lies in the provision of improved fire weather information to forest owners, land owners and the public. This also increases their awareness of – and response to – prevailing fire danger conditions, resulting in fewer fire starts and escapes, lower fire-fighting costs and reduced environmental impact.

However, according to Dodson, in addition to fire forecasting at their fingertips, forest owners also get other benefits from the system.

"These include the forecasting of wind strengths and direction, which is very useful for improving the safety of tree felling and harvesting work, and for checking weather conditions for aerial work, including spraying."

He thoroughly recommends that, if they haven't already, forest owners install the program and use it.

The research was carried out in 2012 and early 2013 and the new network came into operation in August 2013. NIWA provided the systems and operating framework, weather modelling, data control and climatology made accessible through its 18 tonne Wellington-based supercomputer, nicknamed 'Fitzroy', while Scion provided expertise on the latest fire danger rating science.

Funding came from the NRFA, Department of Conservation, Local Government, Ministry of Defence, the Forest Growers Levy and the Ministry for Business Innovation and Employment. As part of the project, the Canadian fire danger rating system was studied and found to be suitable for New Zealand forest conditions.



Grant Pearce
Scion senior rural fire scientist



Fitzroy's eyes and ears
This one is monitoring conditions in Ruapehu

GROUNDWORK COMPLETED, NOW RACE BEGINS

FINDINGS FROM A MAJOR RESEARCH PROGRAMME WILL HELP LOG, TIMBER AND HORTICULTURAL PRODUCT EXPORTERS TO IDENTIFY NEW WAYS TO COMPLY WITH PROPOSED RESTRICTIONS ON THE RELEASE OF METHYL BROMIDE.



Marlborough's Shakespeare Bay is currently a log fumigation site
By 2020 the industry plans to have tools that will eliminate the need to release MB gas to the atmosphere after fumigation

For the last three years, Stakeholders in Methyl Bromide Reduction – or STIMBR – and the Ministry for Primary Industries have co-funded research to identify viable alternatives to the fumigant and the way it is now used. The research programme, which was completed on 30 June, was a Primary Growth Partnership (PGP) project.

“It produced a wealth of data and a number of tools for research and industry use,” says STIMBR research director Ian Gear.

The Environmental Protection Agency ruled in 2010 that the release of MB to the atmosphere after the fumigation of imports and exports must cease from 2020. This is because MB is a gas that depletes ozone. MB fumigation is used internationally as a phytosanitary treatment for preventing insects from moving from country to country on traded goods, so alternative treatments must comply with strict standards set by the importing country.

“The PGP programme was designed to identify which of the many possible tools and alternative fumigants would be worthy of further investigation. We now have a better understanding of what will and what will not provide viable alternatives. The

research field has been narrowed and ensures future industry funds will be invested to best effect,” Gear says.

The PGP programme’s achievements and highlights include:

- Undertaking a comprehensive review of alternative fumigants
- Developing a robust process for preparing efficacy data sets
- Insect breeding to use in the development of efficacy data sets for alternative treatments
- Quantifying log respiration to determine its effect on the fumigation atmosphere
- Developing a reporting system for MB which was implemented nationally
- Developing Best Practice Guidelines for MB fumigations, which are now in use
- Modelling MB fumigation dispersion developing an efficacy data set for MB (this work is ongoing)
- Completing a study on the feasibility of MB recapture/recycling engineering

- Validating MB destruction technologies
- Developing an MB destruction substrate (noting this is not viable for use with logs)
- Completing preliminary tests that indicate the fumigant EDN may be a suitable fumigant for logs
- Providing preliminary information to guide a research programme to determine periods when fumigants may not be needed
- Establishing a nationwide forest insect trapping network
- Developing of a Proof of Concept for Joule heating of logs (development of this technology continues)

The work completed by the PGP programme will allow industry to keep up the good momentum as it seeks alternative treatments for methyl bromide and the development of technologies to reduce emissions to meet the Environmental Protection Agency’s 2020 deadline.

“On the back of early discoveries within the programme Scion, supported by STIMBR, was successful in securing funding from the Ministry of Business, Innovation and Employment (MBIE) to progress some of the research further, beyond the PGP programme,” Gear says.

“STIMBR is fully aware it must now actively drive research so the tools and technologies required by industry are delivered before 2020. This will take a coordinated and sustained effort.”

Gear says STIMBR has recently developed a comprehensive research strategy through until 2020 in which priority is being given to the development of the most time-constrained of the tools that have promise. This follows consultation with key stakeholders including the Ministry for Primary Industries.

“STIMBR is making every effort to progress research in as many areas as possible to provide a number of alternatives for MB, or possible MB recapture technologies. STIMBR is also monitoring completed technologies that could be utilised by local industries to enable them to meet the deadline,” he says.

WORKING TO CHANGE RED TO GREEN

HAVING IDENTIFIED THE BUG THAT CAUSES RED NEEDLE CAST (RNC), SCION RESEARCHERS ARE NOW HOPEFUL THEY WILL ONE DAY BE ABLE TO RECOMMEND CONTROL MEASURES TO FOREST GROWERS.

In May 2008, a mystery needle disease on the East Cape of the North Island was found during a routine forest check. Unfamiliar dark bands, or lesions, were noted on green needles. The needles turned red and could be detached easily, giving rise to the local name of red needle cast.

Affected needles were analysed by researchers at Scion and an unknown species of *Phytophthora* was isolated from them. In 2012, DNA sequencing matched it with *Phytophthora pluvialis*, a newly described species from Oregon, USA.

Phytophthora, which literally means ‘plant destroyer’, are associated with serious plant diseases worldwide, including the blight that caused the Irish potato famine. In New Zealand, *Phytophthora* species are responsible for kauri die-back, collar and crown rot in apples and disease in avocados and grapes.

Lindsay Bulman, forest pathologist and science leader of the Scion forest protection team, says the team was concerned about the disease when it first alerted stakeholders.

“We didn’t know how far it would spread or how it would behave in following years. We immediately made it a priority for research.



Red needle cast: Distinctive lesions and bands are pointers to red needle cast infections. In severe cases, the needles turn red, then brown, before being shed

In partnership with the forest industry and in consultation with MPI, we started a programme to control the disease and to ensure the pathogen wasn’t a risk to trading partners.

“As part of that, we needed to develop a chemical control method to manage outbreaks that was cost-effective and compliant with Forest Stewardship Council rules,” he says.

Scion pest management research leader Carol Rolando says Agrifos 600 (potassium phosphite) was chosen as a candidate as it was already used for controlling *Phytophthora* diseases overseas and in New Zealand by the horticultural industry. Copper fungicides were also explored, as they were already widely used to manage dothistroma needle blight.

“In controlled trials, both phosphite and copper were shown to be effective against *P. pluvialis*. We had some concerns that the efficacy of copper would be compromised in the field when fully exposed to sunlight and rainfall, and, given the urgent need to

find a control, we decided to focus on phosphite in our next set of experiments. We were very pleased when these showed that phosphite sprayed onto the foliage of young pines significantly reduced the formation of RNC lesions for up to eight months,” she says.

“Together with Plant Protection Chemistry NZ, we also investigated ways of improving phosphite uptake using adjuvants, the additives that help sprays wet, stick to and penetrate the foliage. The best of these was an organosilicone blend, Du-Wett® (Etec Crop Solutions Ltd, Auckland). When applied at 0.2%, it increased phosphite uptake nine-fold compared to the active ingredient applied alone.”

Orlando says the trial results show phosphite has great potential as an effective chemical control for RNC. One application could provide protection for up to a year.

“Now we need to get out into the field, confirm our initial results, determine the best dose rates, the best times to spray for RNC and how effective phosphite is at an operational scale. This is planned for the coming year.”

Bulman says *Phytophthora* diseases remain a concern. A lack of variation in *P. pluvialis* DNA indicates that the organism is a recent arrival in the country, although exactly when and where it arrived are unknown. Reports of new *Phytophthora* species, diseases and changes in behaviour of established *Phytophthora* species are increasing worldwide.

continued page 8



NEW QUALIFICATIONS READY TO GO

GOOD PROGRESS HAS BEEN MADE WITH THE FOREST INDUSTRY'S NEW NATIONAL QUALIFICATIONS, WHICH ARE EXPECTED TO BE INTRODUCED IN EARLY 2015.

This follows a three-year NZ Qualifications Authority (NZQA) review of all qualifications to ensure they were fit for purpose. In May 2013 this crossed over with the merger of FITEC, the former forest industry ITO, into Competenz, the new super ITO.

Competenz covers 37 industries but forestry is not lost in the mix. It is one of only two industries to have a standalone business unit and a national manager. This is designed to give forestry the training focus it needs to lift safety and productivity. Some 2500 forestry trainees are working towards their qualifications through Competenz.

Mark Preece was appointed national forestry manager in June. He explains that where, previously, there were national qualifications and local qualifications run by polytechnics and training providers, the review proposed one set of qualifications

that everyone in the industry could train toward.

The Forest Owners Association (FOA) has been consulted throughout the process, with considerable input also from the Forest Industry Contractors Association (FICA) and its members.

“All of the qualifications have now been completed and sent off to NZQA for approval,” reports Preece. He is hopeful they will all be listed by NZQA before Christmas.

National Certificates will be replaced by New Zealand Certificates early in 2015. Preece says they’ll be better suited to the needs of employers and learners.

“For example, the core of each new qualification gives more weight to essential knowledge like health and safety. We’ve also added a supervisory qualification at Level Four.”

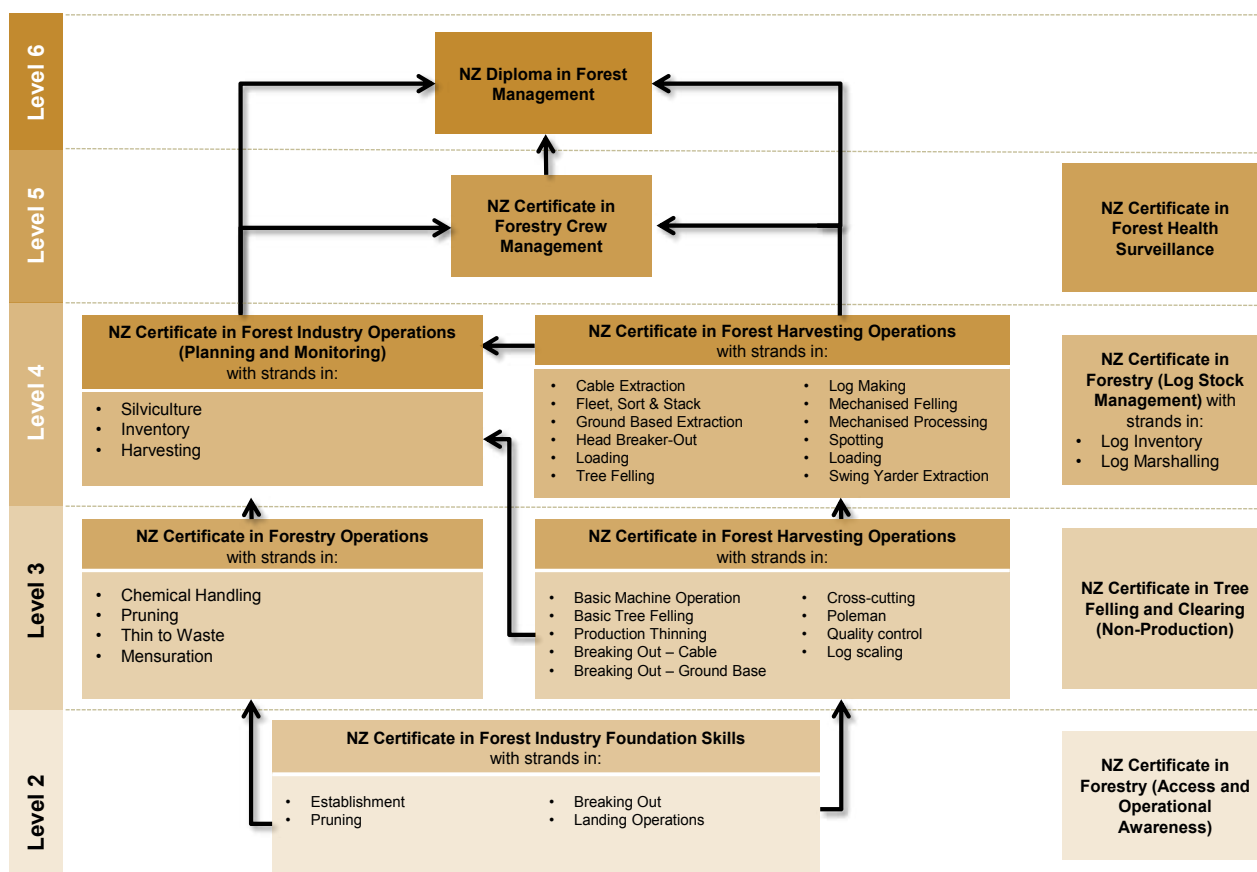
Preece says the transition from the old to the new qualifications will be gradual – over the next 12 months – to enable students who have already embarked on their qualifications to finish those. New entrants will start on the new forestry qualifications in 2015.

Preece and his colleagues are now working on a fourth stage, gaining approval for the industry training programmes that Competenz will deliver on behalf of the industry. The ITO is also developing the necessary learning materials and processes, so that everything will be ready to go in the New Year.

So far, Preece says everything has gone smoothly with the qualifications revamp. He thanks everyone who gave feedback and filled in the Competenz survey: “Industry feedback is key to everything we do.”

Find out all about the new qualifications: www.competenz.org.nz/industry/forestry

New Zealand Certificates and Diplomas (Forestry)



The draft qualification map for New Zealand forestry certificates and diplomas that, with approval from the Tertiary Education Commission, will be rolled out in 2015

SAFETREE PUTS WORKERS SAFETY FIRST

SAFETREE, A NEW INDUSTRY-LED SAFETY INITIATIVE CO-FUNDED BY THE FOREST OWNERS' ASSOCIATION (FOA) AND ACC IS DUE TO LAUNCH IN EARLY 2015.



It also involves the Council of Trade Unions, WorkSafe NZ, the NZ Farm Forestry Association, the Forest Industry Contractors' Association, as well as worker representatives.

"This is the first time all of these diverse parties have joined forces to work towards a common goal – putting an end to serious harm and fatalities in New Zealand forests," explains ACC forestry programme manager, Diego Rodriguez.

"ACC is very excited about the potential of Safetree. We know that for any safety programme in forestry to be successful in driving behaviour change it must ensure that the needs and perspectives of workers themselves are at the heart of the initiative."

Safetree project manager, James Treadwell, comes from a forestry

background and knows only too well how a well-intentioned safety campaign can miss the mark if it's not relevant to the workers it aims to protect.

"One of the most important aspects of Safetree is that worker representatives have a seat at the table. This means they can tell government and industry partners what really goes on on the forest floor, and what they need Safetree to be in order to make things safer for them and their crews," Treadwell says.

In addition, he says Safetree has a 360 degree view of the forestry sector, thanks to the involvement of a full range of government and industry partners. "We have a number of initiatives we're working on – it's an ambitious project – and we couldn't achieve our goals if we weren't all working together."

He says that Safetree will include safety information, collateral and resources designed to be relevant to everyone in the industry, ranging from forest workers, foremen and contractors through to supervisors, forest owners and managing directors.

"We're looking forward to kicking things off more formally in early 2015 with the Safe Start Breakfasts. These events for contractors and other forestry professionals are held all over the country in January and are a great chance to start the year off on the right note with the launch of Safetree."



FOA SUPPORTS SAFER ROADS

The University of Canterbury is to launch a new research project to help forest owners building safer forestry roads with minimal environmental impact.

Dr Kris Brown, who recently graduated with his PhD from Virginia Tech, USA, will lead the project. His PhD focussed on improved road construction techniques to minimise environmental impacts, but he is excited about expanding his research to include both logging efficiency and safety.

The project has been made possible by a grant of \$100,000 a year to the university's School of Forestry. The first grant was funded by the Forest Owners Association, but for the next five years the funding is expected to come from the Forest Growers

Levy Trust. The school teaches forest engineering skills to forestry science students as well as forest engineers.

Associate professor Rien Visser says this support is important. The number of teaching staff will be increased, a post-graduate scholarship is being offered for either a Masters or PhD student and there will be more outreach opportunities such as workshops.

He says all graduating forestry students need more core forest engineering skills, including harvest planning, being able to cost-effectively design infrastructure, understand environmental standards and, most importantly, being able to effectively manage safety.

FOA executive member Grant Dodson, who is also chair of the School of Forestry advisory committee, says a professional forest industry needs graduates who can make a true contribution to safe and profitable forest operations.

"The Independent Forest Safety Review also made the point that infrastructure improvements are needed to ensure we have safe workplaces. Funding the School of Forestry in this way is therefore both fitting and timely," he says.

More than 1400 km of new forestry roads are built each year in New Zealand, along with hundreds of skid sites, culverts and

bridges. Their quality and adequacy are variable and some are not up to the mark ... an issue the research will help address through improved design standards.

"The industry spends about \$200 million a year on roads. [It] is seeking to build 'fit-for-purpose roads', a concept that attempts to minimise costs while not compromising safety and environmental performance," Visser says.

Research at the university has indicated the industry can readily improve its road construction practice by correctly testing and subsequently compacting the substrate on which the road will be built.

"Most forestry companies use aggregates from in-forest quarries, and these aggregates do not typically meet a strength standard on which the national design curves are based. While new design standards for the lower quality material being used have been developed, we still need to test their validity," Visser says.

"Safety is so important. A fully loaded logging truck can lose traction on a corner on a steep section of road with potentially fatal consequences."

Dodson says the \$100,000 annual instalments have been approved in principle by the Levy Trust, but are subject to sufficient funds being available each year.



As part of his forest engineering studies a University of Canterbury student tests a forest road for strength/stiffness using a Clegg hammer

IN THE NEWS

PLANTATION LEVY UNCHANGED

The Forest Growers Levy Trust (FGLT) has approved a commodity levy of 27 cents per cubic metre for the 2015 calendar year. This is unchanged from the rate that applied in 2014.

The levy, which is mandated under the Commodity Levies (Harvested Wood Material) Order 2013, applies to all harvested wood material from plantation forests in New Zealand.

The 2015 Work Programme, which will be funded by the levy, was being finalised as this issue of the *Forestry Bulletin* was going to press. Details will be posted on the Trust's website, www.fgl.org.nz in mid-December and will be the subject of an article in the next issue of the *Bulletin*.

FOA OFFICE HOLDERS

The FOA board for 2015 was confirmed at the association's AGM on 15 October.
President: Paul Nicholls, Rayonier NZ Limited, Auckland

Vice President: Peter Clark, PF Olsen Ltd, Rotorua

Elected members: George Asher, Lake Taupo Forest Trust; Dave Cormack, Wenita Forest Products; Sheldon Drummond, Juken NZ Ltd; Warwick Foran, MPI/Crown Lease Forests; Grant Dodson, City Forests; John Robinson, Summit Forestry; Peter Weir, Ernslaw One Ltd.

By appointment: David Balfour, Timberlands Ltd; Bill McCallum, Hancock Forest Management Ltd; Paul Nicholls, Rayonier NZ Ltd.

MERRY CHRISTMAS

The FOA board and staff wish members, colleagues, associates and friends a Merry Christmas and happy holiday.

The FOA office closes at midday on 24 December and re-opens on 5 January. We look forward to working with you again in 2015.

INDUSTRY ADVOCATE HONoured

Former Institute of Forestry president Andrew McEwen has been awarded a



Andrew McEwen

Commonwealth Forestry Association (CFA) SE Asia/Pacific Regional Award for Excellence — only the fifth New Zealander to receive the honour. NZIF president James Treadwell says this is a great, and well deserved, honour. He says he cannot think of anyone more deserving of the award. "We need the public to understand forestry is a wonderful career which has the ability to improve the world as we know it. While this sounds grand, it is the reality. "Let's try to change the perception of forestry to one of a growing sector which is pivotal to the improvement of the environment and offering excellent career opportunities. Andrew has shown us this can be done."

McEwen will receive the award at the ANZIF 2015 conference.

NEW ACCOUNTANT

Natalia Reid has joined FOA as a senior accountant, taking over from Jay Matthes who has moved to the NZ Institute of Forestry. Reid was born in St. Petersburg, Russia and is a chartered accountant with a background in forestry in Russia and in New Zealand with Carter Holt Harvey. She moved to New Zealand 12 years ago.

Email: natalia.reid@nzfoa.org.nz

continued from page 5

"With ever-expanding global travel, transport and trade, it is likely other *Phytophthora* species will find their way to New Zealand. And it is possible that *P. radiata* will be susceptible to at least some of them," he says.

Genetics may provide a long-term solution. Resistance to disease seems to be a moderately heritable trait in pine trees and Scion and the Radiata Pine Breeding

BIOFUELS A STEP CLOSER

The Stump to Pump PGP programme, led by commercial partners Norske Skog Tasman and Z Energy, has concluded that it is technically feasible to produce transport biofuels from radiata pine forest waste. The technology they are using has not been disclosed and is confidential to the programme partners.

This feasibility study, which was completed in September, is being followed by studies into the commercial viability of the technology and to ensure that the biofuels produced meet market specifications. This work will be funded by the commercial partners.

The study determined that enough forest residues are available to support biofuel production in New Zealand, and the volume is predicted to grow over time.

In a report summary, the partners say the "technology exists that converts forestry residues to hydrocarbon liquid biofuels. While the current data shows that the products do not yet fully meet New Zealand fuel specifications, efforts are underway to enhance the process and improve the quality of both the petrol and diesel fractions." The partners believe the establishment of a viable biofuels business will have a significant positive influence on investment elsewhere and particularly upstream in the forestry and wood processing sector.

Once this next industry-funded phase of work is complete, there is potentially an opportunity to progress towards plant development and ultimately commercialisation.

For a copy of the final report: <http://bit.ly/1o2oZly>

Company are working together to identify RNC-resistant germplasm to breed robust, disease-resistant trees.

Disease-resistance is just one part of a major six-year Scion-led research programme to address the threat that *Phytophthora* species pose to forestry, horticulture and natural ecosystems. It offers the hope that one day the only colour in our forests will be green.