

## WE'RE SERIOUS ABOUT ZERO

### THREE MAJOR INITIATIVES DESIGNED TO GREATLY IMPROVE WORKER SAFETY ARE ON THEIR WAY TO A FOREST NEAR YOU.

These are the result of many hours of work by FOA volunteers, with professional input from FITEC staff, researchers, Department of Labour and ACC.

“Accident rates in forestry have been steadily falling for several years – reaching an all-time low of 318 ACC entitlement claims in 2010. But this is still too high - we simply have to do better,” says FOA health and safety committee member Wayne Dempster.

“Our goal is zero serious harm. If we all, person by person, crew by crew, make a commitment to work injury-free we have an opportunity to significantly reduce this figure.

“Lost-time injuries in forestry can be severe. They may be devastating for the individual, their family and their workmates. Fear of injury is also a deterrent for people who might otherwise seek work in the industry.”

The FOA health, safety and training committee believes the keys to lowering accident rates include growing and strengthening workplace safety culture and making codes of practice easy to understand and follow. Continued training

and development of the workforce through FITEC is also critical, as is fair and consistent enforcement action.

In the next three months, the *Growing our Safety Culture* programme will be rolled out in a selection of regions with Matariki Forests, Ernslaw One, PF Olsen and Rayonier contractors first off the blocks. This initiative is based on the safety culture tree (See *Forestry Bulletin*, winter 2010).

Industrial physiologist Dr Hillary Bennett, with input from ACC and the FOA, has developed a safety culture assessment tool. With mentor support, crews will use the tool to reflect on their safety experiences and develop simple action plans to target those aspects of their safety culture with most scope for improvement.

The revised and simplified Code of Practice for Forest Operations (ACOP), co-ordinated by Mark Preece of FITEC, is also making positive headway. The draft was sent to FOA members and forest contractors for feedback in early April.

The revised Code will set new standards for safe work practice during breaking out – one of the most hazardous tasks associated with cable logging.

During breaking out workshops run around the country last year, the difficulty of calculating a safe retreating distance during the in-haul was identified as an issue. Don Ramsay of ACC says two teams, one in the Gisborne region and one in Nelson, have been working on potential solutions.

## IN THIS ISSUE

**PAGE 2**  
**Opinion:**  
**Wooden phoenix for Christchurch?**



**PAGE 4**  
**Feature:**  
**Economic game of two halves**



**PAGE 6**  
**Biodiversity NPS**  
**bad news for trees**



Les Bak from Nelson Forests has taken things a step further, and building on the work of Rob Prebble, has developed a breaking out standard against which crews can be assessed. This standard is being trialled with Nelson Forests, Blakely Pacific and PF Olsen, and has been demonstrated to FICA members at a field day. The future of the initiative will depend on the outcome of discussions with industry players during the next month or two.

Meanwhile the Department of Labour and ACC are working with stakeholder groups, including the FOA, on a sector action plan requested by the minister of labour.

Dempster says that one of the issues identified in the plan is the fact that about a third of the forest workforce is “flying under the radar”. These are the crews working for contractors who don’t belong to FICA, in forests whose owners don’t belong to the FOA.

“There’s frustration among contractors who are losing trained crew members to competitors who, in some cases, aren’t applying industry best practice to their operations. For example, drug and alcohol testing is a practicable way to reduce harm, yet some are not testing. FOA members are concerned that the actions of these operators will reflect badly on the whole industry.”

A possible incentive for these people to come into the tent will be performance-based ACC premiums which were introduced on 1 April. However, the size of the difference between the premiums paid by good versus poor performers is still unclear.



**Cable logging is hazardous:** building an effective safety culture and assessing performance on the job will reduce accident rates even further



## IN SEARCH OF A WOODEN PHOENIX

**IT IS NOW BECOMING CLEAR JUST HOW LONG THE ROAD BACK TO NORMALITY WILL BE FOR THOSE WHOSE LIVES WERE TURNED UPSIDE DOWN BY THE CHRISTCHURCH EARTHQUAKE OF 22 FEBRUARY.**

While the rest of us focus on our everyday routines, the heart of Christchurch remains cordoned off and residents of wrecked houses try to stay warm as the cold of the Canterbury winter creeps in.

The cruel irony is that the catastrophic damage to the city's infrastructure leaves a blank canvass on which to paint an exciting new future. Napier is such an example.

But becoming an art deco attraction was somewhat fortuitous. In Napier, the design for much of the rebuild after the 1931 earthquake was in the hands of young

architects who were strongly influenced by the deco styles then sweeping America. Without this influence the result would likely have been an eclectic mix of camels and pineapples. Each is a clever product of nature, but they are incongruous when lined up alongside each other. Those in charge of the rebuild of the Christchurch CBD are determined to avoid such an outcome.

It is critical that a community-led vision is developed for a rebuilt city. Warren and Mahoney and Boffa Miskell are at the forefront of this – bringing together experts from a wide range of disciplines to help develop concepts for a vibrant, new city centre.

One aspect of this will be look and feel. Equally important will be the materials and technologies used.

Former forestry minister Jim Anderton wants wood to play a prominent role. As well he might. Anderton was instrumental in establishing centres of wood design and engineering excellence at Auckland and Canterbury Universities. He knows what wood can deliver for the people of his city.

He and David Carter, the current minister, have both seen the innovative technology that has been developed at Canterbury University in collaboration with the Structural Timber Innovation Company Ltd (STIC).

This, literally, local research has shown in a compelling way how high quality medium-rise buildings can be rapidly built using a technology based around the use of wooden frames, reinforced with tensioned steel cables. Such buildings offer large open spaces, excellent living and working environments, and resistance to natural

hazards. Better still, they are made from a sustainable home-grown, renewable resource which offers CO2 storage and the unique look and feel of wood.

The Nelson Marlborough Institute of Technology used the technology to build its arts and media building in Nelson last year – a world-first. Other buildings are now underway elsewhere in the country.

In parallel with this development there is growing commercial support for wood-rich pre-fabrication. The latest example is a 16-storey twin tower block at Auckland University in which wood-framed modules sit within a concrete and steel framework. The designers are Warren & Mahoney.

Cross-laminated timber (CLT) is finding favour overseas. In January the world's tallest wooden (9 storey) building was opened in London. The tower's structural system consists of CLT panels pieced together to form load-bearing walls and floors.

That structure will soon be pipped by a 10 storey wooden building in Melbourne. Even Beijing will be joining the multi-storey wooden building party. But both will be well overshadowed by plans in Norway to deliver a 16 to 17 storey wooden contribution to sustainability.

Taking these technologies into account, it becomes clear that today's smart little pig would not be building in brick. He would be building in cost-effective, earthquake-resilient, environmentally-friendly wood and, what's more, he would enjoy living with wood's natural look.

Of these attributes earthquake resilience should be the one that ultimately drives the choice of materials in the Christchurch rebuild. Experience around the world shows that well-built lightweight wooden buildings perform extremely well, even in severe quakes. And where they do collapse, they are less likely to kill or injure the occupants.

In Japan the use of wood in new home construction became mandatory following the Kobe earthquake. Wood-framing is also preferred in other earthquake-prone regions such as British Columbia and Washington State.

In LAquila, Italy, which suffered a devastating earthquake in 2009, the use of wood in construction has taken off. Engineer Paolo Lavisci says his business has completed designs for six to 12 storey buildings for 'traditional' building



**The NMIT Arts and Media Building in Nelson has a revolutionary wooden frame structure, reinforced with tensioned steel cables. Hopefully it will be a wood-rich prototype for many medium-rise buildings in the rebuild of Christchurch.**

## BUG LAW BRINGS BIGGER BILL



**Phytophthora pinifolia:** it is critical that our border biosecurity keeps pests like this out of New Zealand and that there is a rapid response if it is detected

companies who a year ago would never even commission a timber house.

Lavisci's company was among those awarded a tender to build a number of three storey, 27-apartment blocks using timber. Made from CLT sections, their construction took only 72 days. The completed blocks weighed around 430 tonnes, compared with more than 2000 t if they had been built in concrete. Because earthquake stresses on a building are proportional to its weight, these buildings will be less likely to sustain damage in future quakes.

Before the mass rebuild begins in Christchurch serious thought needs to be given to the adoption of new technologies that will make the city's new homes even more sustainable and resistant to tectonic forces than those built using traditional techniques. For example, a timber raft substructure linked to a CLT main structure may make homes in liquefaction-prone areas better able to withstand ground destabilisation in a quake or landslip.

Assuming wood gets the nod for the rebuild, how well is our industry placed to deal with the massive resulting demand?

Despite the record volumes being exported to China (see story p4), 50% of everything harvested in New Zealand still heads for a domestic processing site. There is also the potential to significantly increase harvest levels of mature trees – and to do so sustainably. In other words, we have the ability and resources to ensure that all of the wood used in Christchurch is home-grown.

The importance of renewing rather than replacing cannot be overstated for Christchurch. Creating an exciting vision of what this might entail will provide an anchor for the hopes and aspirations that need to be nurtured through the days when the world's focus is elsewhere.

## FORESTWOOD - DIARY IT NOW

The success of ForestWood 2010 means the conference will be repeated on 21 March 2012 at Te Papa, Wellington. Please diary it now.

It will include meetings of sector organisations, followed by a full-day industry conference, with top speakers from around the world. Sponsorship and trade exhibition opportunities will be available from July 2011 on [www.forestwood.org.nz](http://www.forestwood.org.nz)

### **SWEEPING CHANGES TO BIOSECURITY LAWS WILL GIVE FOREST OWNERS MORE SAY IN THE MANAGEMENT OF EXOTIC PESTS.**

In return they will have to pay their share of response to a pest incursion.

The Biosecurity Law Reform Bill now before the Primary Production Select Committee aims to make the country's biosecurity system more responsive to rapid changes in trade routes, tourism and methods of transport.

A big positive for biological industries like forestry is the requirement for importers to pro-actively manage the biosecurity risks of the goods they import. The same goes for operators of transitional facilities – the places where imported goods are taken for inspection and treatment. At the moment too much relies on inspections by MAF staff.

The penalty for operators with sloppy biosecurity systems could be severe. 'Exacerbators' may have to pay the cost of controlling unwanted organisms they let through the gate.

"MAF will enter into joint decision-making and cost-sharing agreements with industry groups who wish to participate. These government-industry agreements (GIAs) will cover preparations for, and responses to, harmful organisms that enter New Zealand," says FOA senior policy analyst Glen Mackie.

"The big advantage of them is that industry will sit at the table making decisions with government on how to deal with pest incursions. For forestry this will be a logical extension of our existing self-help philosophy, but it nonetheless means we will have to pick up a greater share of the tab.

"Those industry groups that don't wish to participate won't be involved in decision making, but they are likely to be billed for the cost of the incursion response anyway."

He says the Bill encourages industries to take responsibility for themselves, rather than relying on third parties. The benefits of being prepared (focusing each industry on 'what if') could easily be the most important outcome of the legislation.

"For more than 20 years forest owners have been funding biosecurity surveillance of 1.2 million hectares of plantation forest a year. We also work very closely with MAF.

"Some other industries take little responsibility for their own biosecurity and are not really focused on readiness, so the change of culture that will be brought about by the Bill has come as a bit of a shock."

The government will continue to pay most of the cost of handling most incursions because of the way public good is counted under the Bill. In the case of forestry, the public good component is high compared with many other land uses – thanks to the unpaid services provided by forests, such as soil and water protection, carbon sequestration, recreational/community use and biodiversity enhancement.

Mackie says more analysis of the "fine print" is needed before the industry signs up. Also consideration needs to be given as to how industry would pay its share. At present there is no mechanism for ensuring that all tree growers pay their fair share of an incursion response.

#### **More?**

Biosecurity Law Reform Bill:

<http://tinyurl.com/49pkh5c>

The FOA submission on the Bill will be published on the FOA website once it has been presented to the Select Committee.

# FORESTRY IN A GAME OF TWO HALVES

**FOREST GROWERS IN NEW ZEALAND, NORTH AMERICA AND ASIA ARE RIDING A WAVE OF GOOD FORTUNE DRIVEN BY STEADILY GROWING DEMAND FROM CHINA AND TO A LESSER EXTENT, INDIA AND JAPAN.**

The Chinese economic miracle has in effect rescued forest owners from the effects of a severe slump in new housing starts in Australia, Korea, New Zealand and the United States – traditionally the biggest markets for New Zealand lumber.

Strong demand for export logs means forest harvesting contractors are struggling to find labour at a time when some timber mills are making staff redundant, or closing altogether.

While those at the rough end of the stick see bitter irony in this, neither wood processors nor forest owners want NZ mills to be insulated from having to pay market prices for their log supply.

“We all agree that an innovative and competitive wood processing sector is needed for our forest industry to have a healthy long-term future,” says FOA President Peter Berg.

“Forest owners can certainly look at wood supply arrangements that provide more certainty for wood processors, however a subsidised wood supply is not the answer.”

This doesn’t mean our wood processing industry isn’t valued by forest growers or that mill owners aren’t hurting. Rather, it reflects the wisdom that trying to second guess markets is a futile and costly exercise.

As if to confirm this logic, the second Christchurch earthquake struck in February, followed in March by the record quake and tsunami in Japan. When the disaster recovery teams move out and the reconstruction crews move in, demand for lumber, plywood and fibreboard will inevitably increase in both locations – demand that no-one could have predicted. But even without these Acts of God, sooner or later the market correction that began when the housing bubble burst in 2008 will come to an end.

## China driver

We also don’t know how long China can keep sustaining annual increases in demand for our logs.



**The rebuilds of Christchurch and Japan will do much to trigger renewed demand for lumber and processed wood products. Image: [www.raw.co.nz](http://www.raw.co.nz)**

According to the International Wood Markets Group (IWMG), China’s log imports in 2010 were up 22% by volume and 49% by value on 2009. Its lumber imports went up 49% by volume and 65% by value to 14.7 m<sup>3</sup> (US\$3.8 billion).

Russia was the biggest lumber supplier (up 40%), Canada (up 65%), the United States (up 54%), Thailand (up 38%) and New Zealand (-1%). Russia also remained the biggest log exporter (although down 5%), followed by New Zealand (up 35%).

IWMG expects Chinese wood demand to continue to increase by 8-10% a year for the next five years, even though wood is still a minor player in the Chinese housing market. Most houses in China are made from reinforced concrete or brick and NZ logs are mainly used in a support role – for concrete boxing or product pallets .

Wood-framed houses have been strongly promoted in the past by the Canadian, New Zealand and American wood industries with only limited success. But Canadian financial analyst Paul Quinn senses change in the wind.

“Many believe we are close to a tipping point where wood-frame construction takes a significant market share,” he says. His optimism is offset by the pessimists who say the construction boom is being driven not by consumers, or by a newly affluent middle class, but by the Chinese Government using its foreign reserves to stave off a potential recession.

In *Pallet Enterprise* magazine Dr Charles Ray of Penn State University says the Chinese house price bubble will burst far more dramatically than anything that has

occurred in the United States. Chinese Government efforts to prevent this – mainly by increasing interest rates – have the potential to depress demand for all commodities including logs and wood products.

So far there is no sign of this happening. China’s first interest rate increases were in November and log prices have increased each month since then.

Another potential negative was Russia’s surprise decision in November to reduce the 25% log export tax that has been credited by some for being the main driver of increased Chinese demand for logs and lumber from New Zealand and elsewhere.

However, the decision barely caused a ripple. A reflection, perhaps, of the growing belief that the introduction of the export tax in 2008 was the final straw for an uneconomic Russian log industry. Since then the Russian industry has rationalised, established a new price structure and wasn’t in a position to keep meeting ever-increasing Chinese demand anyway.

## Japan sun was already on the rise

Japan has long been an important market for NZ logs and wood products. Demand there fell dramatically in 2009 and then slowly recovered through 2010.

Housing starts were up 3.1%, the first increase in two years. Importantly, the market share of wood reached 56.6%, the highest in a quarter century. NZ plywood manufacturers were among those who benefited – their exports to Japan jumped 42%.

Based on the experience of what happened after the 2005 Kobe earthquake, mass reconstruction in Japan is expected to begin about six months after the recent earthquakes and tsunami. Changes to the Japanese building code following the Kobe quake favoured the use of wood, so suppliers in New Zealand and North America can be expected to benefit.

#### Implications at home

At \$97/jas metre in the December quarter, the all-grades average price for radiata logs in New Zealand is higher than it has been (apart from a brief price spike in late-2002) since the 1990s.

According to Statistics New Zealand, log exports reached \$2.6 billion in the year to January – up 13% from \$2.3 billion the year before.

Strong demand and high prices have made it economic to harvest forests in steep, remote hill country where logging and transport are costly. The resulting wall of wood is having all sorts of implications. Forest contractors and log truckers are short of trained labour and log holding areas at ports are bulging at the seams.

One thing it hasn't done is trigger a surge of new plantings. Despite a new potential income stream from carbon, only 6000 ha of new forest were planted last year – a figure that, going by current indications, may lift this year.

But until investors are convinced that carbon prices are likely to be economic through the growing cycle of the crop and affordable catastrophe insurance is available for carbon loss, question marks hang over the likelihood of new large scale carbon plantings.

As for the economics of growing new forests for wood alone, that depends on an easing of land prices for sheep farms which could be converted to forestry. This may take some time. Prices for sheepmeat and wool have jumped recently and these will inevitably be capitalised into the price of land, making it less affordable for forestry.

For the last two years the NZ building industry has been in a slump, with demand from a growing population being met from the surplus stock of houses and units built during last decade's property boom. So, for wood processors and builders, the rebuild of Christchurch can't come soon enough (see Opinion, p2).

On the positive side, the Reserve Bank eased the official cash rate in March and shortages of rental accommodation in Auckland are making the national news. On the downside, property prices have yet to bottom-out, making developers and highly-g geared home loan borrowers ultra-cautious.

Meanwhile timber mills – particularly those with older equipment – are going to the wall both at home and in North America. While this is painful for the victims, it means excellent prospects for surviving mills when the recovery eventually comes.

IWMG president Russ Taylor says that lumber prices in the United States doubled in the 2-year rebound that followed the last (1991-1992) housing bust. This time round, the bust has been much more severe and prolonged, so he expects a more dramatic rebound when the recovery kicks in.

This will be good for NZ wood processors, like Tenon, that export to the United States. It will also mean that US softwood logs and lumber that have been recently competing with NZ radiata in China are likely to rediscover their domestic market.

In Australia, New Zealand's largest market for wood products, new home building consents have dropped to 2002 levels. While a strong Aussie dollar is normally good for NZ exporters, the Aussie is up against all major trading currencies, which means the Australian market is also attractive to competitors from North America and Europe.

Meanwhile, demand from China for radiata logs roars away.

It truly is a game of two halves.



The demand for radiata in China is huge, even though it is normally used for humble purposes. No-one knows how long this demand will be sustained. Image: Stas Kulesh

## BY THE NUMBERS...

# +35%

increase in NZ log exports to China in 2010

# +40%

increase in US lumber prices in 2010

# 5.8 MILLION

'affordable' home units built in China in 2010

# 5000

the number of Chinese homes built from wood

# 517,000

home building permits issued in the USA in February – the lowest figure since records began in 1959

# -15.9%

fewer Australian building permits in January 2011 – the biggest fall since November 2002

# 1000

building consents issued in New Zealand in February – 50% of the monthly total reached in 2007

# BIODIVERSITY NPS CONCERNS

## FOREST OWNERS HAVE MAJOR CONCERNS ABOUT A DRAFT NATIONAL POLICY STATEMENT ON INDIGENOUS BIODIVERSITY ON PRIVATE LAND.

New Zealand's signature on the Convention on Biological Diversity means it needs to put a NPS in place. But the political fish hooks are such that successive governments have failed to do so, despite work starting in 1999.

Indeed, before it was even published, the statement was criticised as weak by the Greens and a potential infringement of property rights by Federated Farmers.

Minister for the environment Dr Nick Smith tiptoes between these tensions. He says the policy will guide councils on the balance that needs to be found in protecting "our unique plant and bird life while respecting the reasonable rights of property owners to use and develop their land".

He wants to see consistent – not tighter – protection for at-risk species and environments from North Cape to the Bluff. The preamble to the NPS seeks to further reassure land owners, saying it is just one of several considerations to be weighed in achieving the sustainable management purpose of the Resource Management Act.

What the minister and the NPS don't say is that the statement gives councils the power to devise measures that could make the harvest of plantations impracticable.

"We are custodians of a significant proportion of the high biodiversity areas remaining outside of the DoC estate. Because of this, the NPS has the potential to penalise plantation forestry," says FOA environment committee chair Peter Weir. Of particular concern is the requirement to manage 'significant habitats of indigenous fauna' and all 'habitats of threatened or at-risk species' so there is 'no net loss' of significant indigenous biodiversity.

"Many areas of standing plantations and cutover forest provide habitat for threatened and at-risk species including the karearea (falcon), pekapeka (bats), North Island brown kiwi, kaka, North Island weka, kokako and hochstetter's frogs," says Weir.

Many also contain significant areas of remnant indigenous vegetation and large areas of wetland. These are often in better



**A karearea (NZ falcon) chick in cutover forest:** Hopefully councils will recognise that regeneration follows harvest

condition than similar areas in adjacent farmland, because there is no nutrient leaching or animal grazing.

"Hopefully most councils would take a long-term view of 'no net loss' and recognise that harvest is followed by regeneration. But as the NPS is worded, councils could potentially develop plans requiring plantation foresters to mitigate or offset the temporary loss of habitat brought about by harvesting of production trees."

There is also a measure to promote the maintenance of non-indigenous vegetation where it provides habitat and food sources for indigenous species, or acts as a buffer for or linkage to identified significant areas.

"It is unclear how this would apply in practice," says Weir, "but again it creates the potential for councils to write rules which would clearly capture all plantation forestry. Areas of plantation being cleared for other land uses would be in the gun."

He says the FOA is still preparing its response. But clearly this part of the policy needs to be rewritten so that it makes sense. Also vegetation that has been established for commercial harvesting, and its understory, needs to be excluded from the definition of both 'indigenous vegetation' and 'significant habitat for indigenous fauna'.

Individual forest owners are encouraged to put in their own submissions, explaining what the proposed NPS might mean for their operations. Submissions close on 2 May.

Once it has evaluated submissions, the Ministry for the Environment will make recommendations directly to the minister, bypassing the Board of Inquiry process used for previous NPS processes.

The criteria for identifying what is rare and/or threatened are based on the government's Statement of National Priorities for Protecting Rare and Threatened Biodiversity on Private Land.

### More?

Statement of National Priorities... on Private Land: <http://tinyurl.com/3mhcuwu>  
NPS on Indigenous Biodiversity: <http://tinyurl.com/4bxpylz>

# NES REVVING AT THE LIGHTS

## THE MINISTRY FOR THE ENVIRONMENT PROPOSES TO MAP NEW ZEALAND'S RURAL LAND ON THE BASIS OF HOW PRONE IT IS TO SOIL LOSS DURING FORESTRY OPERATIONS.

This is a pivotal step in the development of a National Environmental Standard for Plantation Forestry (NES).

The new mapping may use a 'traffic light' system – green, orange, red (and possibly scarlet) – to denote the potential for erosion and sediment delivery to waterways.

Under an NES resource consents are unlikely to be needed in green and orange zones, so long as normal forest operations comply with Best Practice Guidelines and the NES itself. The FOA accepts that consents may be required for earthworks in red zones, but not for harvesting. In scarlet zones, plantation forestry intended for harvest may well be a non-complying activity.

The NES may provide for an approved operator system for earthworks and stream crossing installation if the forest owner or the contractor has a robust environmental management system with audited self-management or third party accreditation.

This will be controversial, but FOA environment committee chair Peter Weir argues it is a policy worth developing.

“Without accreditation many regional councils will insist on consents for operations in erosion-prone country. Accreditation should be very positive for contractors who are professional in everything they do – it will clearly set them apart from the cowboys who ignore standards and bring the industry into disrepute.”

The FOA has been lobbying for nationally consistent forestry rules for nearly 20 years. At present consent conditions vary greatly from district to district and from region to region, sometimes within a single forest. This means added costs, delays and confusion for no environmental benefit.

But when draft 1 of the proposed NES was released for comment last year, forest owners were among those who objected. That's because it would have tightened standards in most regions while leaving room for councils to impose restrictions on top of the standards set. In other words, it would make things worse than what we've got now.



Peter Weir

At present, forestry is a permitted land use in some regions where councils and forest owners work well together – especially Hawkes Bay, Otago and Southland. Under an NES there could be more regulation on some erodible hill country land in those regions.

Weir says “This might be the price that needs to be paid for resolving the regulatory nightmare faced by forest owners in many other parts of the country. It also future-proofs forest owners in those regions against future councils taking a more regulatory approach.

“We are seeing a trend for councils to increase regulation as they move from first to second generation plans. Some of the second generation plans we've seen recently are awful.”

He says the FOA remains very supportive of the principle of developing a NES, especially since the clear intention of government is that it should be based on sound science.

“It's much better to use reason and science to develop the rules of an NES, than to continue fighting political battles on multiple fronts as district and regional plans come up for review.”

A key objective of the NES is to give land owners certainty that the forest they plant now will not face regulations preventing them from economically harvesting it in 30 or more years time. This concept – dubbed ‘front loading’ – was accepted by most of those who made submissions on draft 1 and is seen as a positive step by the FOA.

It's all highly complex, says Weir, but it's worth the battle.

“Our objective is to get an NES for forestry that works better than the mess we are dealing with now and ease us off the RMA treadmill.”

## IN BRIEF

### MACKIE ON FIRE

Climate change and the management of forests to maximise carbon sequestration will have big implications for those charged with preventing and managing wild fires.

FOA senior policy analyst Glen Mackie will discuss some of these challenges in a paper he is presenting at the 5th International Wildland Fire Conference paper at Sun City, South Africa in May.

“Increased temperatures and prolonged dry periods will have an obvious impact. These may be aggravated by pests and diseases having a greater impact on tree mortality and hence fire load. Less obvious is the development of markets for carbon credits which makes managing carbon balances an important issue for fire managers,” he says.

Carbon credit revenue will also alter the nature of a forest investment – influencing species and site selection, silviculture, rotation length and even whether a forest is harvested at all.

#### More?

[www.wildfire2011.org](http://www.wildfire2011.org)

### ILLEGAL LOGGING TEMPLATE?

An Australian Government Bill that plans to knock imports of wood from illegally logged forests on the head could be a template for New Zealand.

The Illegal Logging Prohibition Bill will prohibit the importation and trade of illegally logged timber, implement a code of conduct to ensure timber suppliers undertake proper tests to confirm the legality of the sourced wood, and introduce trade descriptions for legally verified timber products.

FOA president Peter Berg says similar legislation planned for New Zealand was abandoned when National came to office in 2008.

“This was a disappointing backward step. Australia's proposed legislation puts it in line with the United States, the European Union and a growing number of other countries.

“It is disappointing that New Zealand, which has such a good story to tell about sustainable forestry at home, has been so nervous about doing anything meaningful about this damaging trade.”

## CITIZEN PINE

# WHAT ARE TREES WORTH TO THE COMMUNITY?

## IF PINE TREES WERE PEOPLE THEY WOULD FEATURE IN THE QUEEN'S BIRTHDAY HONOURS EACH YEAR.

Although most are planted as money-making ventures, forests also provide valuable unpaid public services. Hillside are protected from erosion and towns from floods. Stream water flow is regulated and its quality improved. Native birds, bats and invertebrates that are absent from open farmland happily live amidst the pines.

Forests are great places for recreation. Outdoor enthusiasts use them to walk, hunt, fish, bike, ride horses and give off-road vehicles a work-out.

In a 2009 *Journal of Forestry* (Vol 54, No 1) article Tim Payn and his colleagues at Scion assessed the economic and social value of the many unpaid services provided by forests to the community and highlighted areas where more facts are needed.

They pointed out that we know what bird, bat and aquatic species make use of plantations. We also know that these populations recover following clear-felling and replanting.

The benefits of afforestation for peak flood flows, soil retention, water quality and stream habitats have been measured, but a dollar value hasn't been put on them. This means some local bodies discourage hill country afforestation in favour of maximising water yields for downstream irrigation, which has a clear economic value.

Strategically located forests in intensive farming districts would help improve lake and stream water quality and scenic values – thereby boosting the clean and green credentials used by our tourism and food marketers. But the financial benefits of these services are not normally captured by those who own the forests.

Even where a value has been put on the environmental services provided by forests – in the Emission Trading Scheme (greenhouse gas sequestration) and the Lake Taupo catchment scheme (nitrogen reduction) – investors and other land users

are still struggling to come to terms with the concept.

When they do, Future Forests Research points out that there's more than 2.5 million ha of NZ hill country where production, bioenergy and carbon forests would have soil and water conservation benefits. In addition there's 65,000 ha potentially available in dairying areas for riparian protection.

To help build an international consensus on how the non-production services provided by forests might be valued, the Scion team has been working with Australian and EU scientists in what is known as the TRANZFOR collaboration.

Colleagues in Portugal are developing a web tool that explores the productivity, carbon and ecosystem benefits of afforestation and how these may be affected by climate change. Using this clever prototype tool (see link below), you can click on land anywhere in New Zealand and see the implications of conversion to forest.

What about the value of forests for recreation? Can a figure be put on it? Scion scientists, working with Timberlands environmental manager Colin Maunder, believe they can.

In an article in the *NZ Journal of Forestry*, February 2011, they calculate that the annual value of Rotorua's Whakarewarewa Forest is \$5.2 million for walking and \$10.2 million for mountain biking. That's five times the annual timber revenue from the forest – a relationship that's consistent with European studies.

The authors don't suggest the forest owners would get this sum if they put toll gates at the boundary of the forest. But it provides policy and decision makers with a measure in dollars of the value the community places on the forest over and above its value for timber production.



Some communities put a much greater dollar value on the recreation they have in local forests than the annual value of the timber the forests produce

For the industry it's also strategically important that society is reminded of these benefits.

To this end a recreation section is being added to the NZ Wood website. Forest owners have been asked to provide information on the activities they allow in their forests, who to get permission from, and some general information about what their forest has to offer.

FOA chief executive David Rhodes says the aim is not to pressure owners to open up more forests to the public: "We simply want to illustrate the range of community services being provided across the country and also to explain why at times there may be conditions attached to access."

Meanwhile the research continues. While trees may never get a gong, decision makers need to be able to put a dollar value on the services they provide the community. If they can't do this, the industry will continue to find itself undervalued and at the wrong end of resource allocation decisions.

The environmental benefits of afforestation (prototype web tool):  
<http://tinyurl.com/yfvqmea>