

BIA standards ignore public health

New building standards to prevent the leaky building syndrome are bound to fail, and show a cavalier disregard for public health, says the NZ Forest Owners Association.

The final standards, which were announced by the Building Industry Authority (BIA) just before Christmas, mainly focus on the use of treated timber in exterior walls.

"The root cause of leaky buildings is moisture entering and remaining in dwellings. The logical solution for the authority would have been to set standards to prevent this from happening," says NZFOA chief executive Rob McLagan.

"It should also have insisted on higher standards of building and inspection."

The new standards are of major concern to the forest and timber industries. They increase the cost and complexity of construction, and unfairly cast doubt on the suitability of construction timbers which New Zealand markets worldwide.

"But for the public, the greatest concern must be that the new standards will not ensure their new homes will be moisture-proof.

"Having treated timber in exterior framing will certainly slow down the rotting process once moisture gets in. But the wall will still rot and the occupants of the house will probably be exposed to toxic spores from fungi and moulds."

Mr McLagan says moulds are now a major public health issue in the United States and Canada.

"They grow on any surface where there is moisture. Treating timber framing has no effect on mould growth on Gib-board or insulation materials.

"In ignoring the ample expert evidence the BIA is showing a cavalier disregard



The greatest concern for the public must be that the new standards will not ensure their new homes will be moisture-proof

of public health."

Lionel Neveu, chief executive of the Canadian Construction Industry Council, says there are an estimated 10,000 mould-related cases currently before US courts.

His council has just released a national standard for builders to help reduce conditions that create mould.

"Black mould is becoming a health issue of increasing concern across Canada, because it has made people sick," says the council.

Houses and buildings have been torn down, and classrooms, offices and a Calgary courthouse have been abandoned, because

occupants were experiencing symptoms such as nosebleeds, headaches and sore stomachs.

NZFOA councillor Lees Seymour says the BIA standards are totally out of step with Canadian and US thinking, where – like New Zealand – Douglas fir is used widely in house construction. Indeed, Douglas fir has been used for house construction for more than a century.

"After studying their leaky building problem, the Canadians rejected the notion of treating framing timber.

"Instead, they tightened building standards, inspection processes and professional accountability so that water would not enter buildings in the first place. Then, as a second defence, they insisted on self-draining and ventilated wall cavities."

Seymour says the new BIA requirement to treat timbers used in exterior framing poses special problems for Douglas fir because it can't readily be treated.

"While it can be used in internal framing, manufacturers of trusses and framing see the use of two species – treated Radiata and untreated Douglas fir – as an unnecessary complication."

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From NZFOA chief executive – Rob McLagan



In my view

Changing times

The forest industry is experiencing a real revolution.

Like most revolutions, we know it is happening, but can't accurately foresee the final outcomes. However, we can confidently predict that in three or four years time, the industry will have changed significantly.

In that time India and China will have increased in relative importance as markets. It is also likely that useful beachheads for added value and branded products will have been established in Europe.

The extent of the industry's progress will depend on its ability to attract significant new investment for new processing facilities, product research and market development.

This in turn will depend heavily on the NZ

investment climate relative to alternative plantation forest growing countries. Unfortunately, current indications are not that positive.

Proposed new labour and employment legislation, and increasing electricity costs, are likely to increase unit production costs. Also, the Government appears reluctant to seriously address the anti-development aspects of the Resource Management Act.

However, the most significant changes will be those arising from the industry's changed ownership structure.

For some time there has been a steady increase in the harvest from small woodlots and Maori-owned forests. Now, two big players – the Central North Island Partnership and Fletcher Challenge Forests – have sold their forests to

private investors or overseas investment groups (Timber Industry Management Organisations).

A more diverse ownership structure is unlikely to result in a slowing in the forecast growth of the industry. Indeed, the new owners may be able to take a longer-term view of industry fortunes. However, it will bring new perspectives and as a result, the path to achieve the industry's vision will change.

The vertically integrated companies which dominated the industry until now have invested heavily in further processing and the development of new end uses and markets for their future supply. While more of this investment will now need to come from companies focusing solely on added value activities, we are also seeing some forest growing companies moving to build or expand their investment in wood processing.

A different ownership structure will also impact on the funding and operation of industry-good activities such as forest health and training, long-term supply contracts, the development of vertical integration, and investment in research and market development. As an industry we will therefore need to find new ways to handle these issues.

One thing that won't change is the continued increase in forest production, providing increased foreign exchange earnings for the country and increased employment opportunities, particularly in new forestry regions.

Some interesting years lie ahead. ▲

Industry Services

Consultants study levy

A proposed commodity levy for the forest industry is being studied by international forestry consultants, Jaakko Poyry.

Their report will be completed by the end of March. It will then be up to the various industry organisations to decide whether to proceed with a detailed levy proposal.

The concept of a levy was publicly floated last year by NZFOA Association president Peter Berg and has since been discussed with the NZ Farm Forestry Association and the NZ Forest Industries Council.

Jaakko Poyry is now studying the issues involved. Stakeholders are being consulted about the desirability of a levy, what it should be used for and how it should be implemented, governed and managed.

Commodity levies are provided for by the Commodity Levies Act. The Act requires extensive consultation and very strong support from the industry in a referendum before a levy can be introduced.

Berg says a levy will not be rushed through. There will be exhaustive consultation at all stages in the process, culminating in a referendum of potential levy payers.

"If at any stage we believe there is unlikely to be strong support for a levy, we will not go any further. However, I must say that I believe the industry needs such a levy if it is to achieve its potential," he says.

"Relying on voluntary levies to provide the common-good services needed by an industry of our size is not satisfactory.

"Not only are the issues we deal with becoming more complex, but with the ownership of the industry becoming more diverse, we can no longer rely on a few major players to pick up the tab. Everyone needs to pay their share, because everyone benefits."

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He says the NZFOA is working with local authorities to see if there is a way to change building standards so that Douglas fir can continue to be used for all framing.

"Also the BIA has requested more information on the properties of Douglas fir – which may provide a window of hope. However, it won't address the unreasonable restrictions on the use of kiln dried Radiata which, in properly constructed houses, is an excellent material." ▲

Peak time for pest watch

Community vigilance is one of the main weapons in the war against forest biosecurity pests, and now is the most important time to keep your eyes open for any suspicious signs.

This time last year two new pests were found, the fall webworm which was found by the public and the Gypsy moth, which was detected by MAF's pheromone trapping programme. There have been no new finds so

far this spring and summer, but MAF Forest Biosecurity Director Peter Thomson says it's not time to relax.

"The peak period for pest incursions runs until mid-April.

"As the chart below shows, we're working towards eradication with the help of robust trapping programmes, but this involves ongoing work for several years.

"The key thing is to stay vigilant, do all we can to prepare ourselves and act decisively with incursions, and don't pull back from eradication until we are sure the job has been done," Peter Thomson said. 🚩

Pest	First found, where	Impact	Action	Status 2004
Dutch Elm Disease (DED)	1989: Auckland City	Elm trees	Annual surveys of all trees; infected and surrounding material destroyed. Beetle trapping.	Suppressed. Still subject to eradication programme.
Fall WebWorm	March 2003: Mt Wellington, Auckland	Wide range of trees, plants and native bush.	Treated host trees and surrounding area followed by trapping programme vegetation control zone. Ground survey and monitoring.	No further sightings. Still subject to eradication programme.
Gum Leaf Skeletoniser	1) 1997: Tauranga 2) 2001: Onehunga 3) February 2003: Large area of South Auckland	Eucalyptus trees	25,000 ha in Auckland city infested. Trapping & vegetation control continues. Research programme to support long-term management approved.	No sightings outside Auckland area. Research programme for long-term management has begun.
Gypsy Moth	1) 1990+ (egg masses and other life stages): shipping containers 2) March 2003: Hamilton – National surveillance programme trap	Wide range of trees, crops, unknown impact on native species.	Aerial spray, vegetation movement control, pheromone trapping, ground searching 1100 traps nationwide.	No further finds. Still subject to eradication programme.
Painted Apple Moth	1999: West Auckland	Serious threat to NZ gardens, crops, forests, native bush.	Large scale aerial and ground spray programmes, vegetation movement control, trapping, ground searching.	Targeted helicopter spraying at 5 residual populations. 1 moth trapped since May 2003. Still subject to eradication programme.
Australian subterranean termites	1940+: Otorohanga worst remaining site	Housing and other wooden structures.	Quarterly inspections, trapping, bait stations.	Last sighting February 2000. Still subject to eradication programme.
Pelto schema suturalis	2000: Wellington, Hataitai Park	Acacia species	Delimiting surveys, ground sprays, repeated surveys.	Declared eradicated in 2004.
Creiis lituratis	2002: Auckland Airport	Eucalyptus species		Not considered eradicable. Some natural enemy control exists.
White Spotted Tussock Moth	1996: Auckland Eastern suburbs	Major threat to gardens, crops, forests, native bush.	Operation Ever Green, Large-scale aerial spraying, mass trapping.	Successfully eradicated in 1998.

Canterbury water conflicts

Proposed restrictions on exotic forest plantings in catchments where rain-fed streams are prone to low summer flows are causing concern among land owners in Canterbury.

They say Environment Canterbury has got its science wrong and needs to look again at the tools it wants to use to restrict plantings.

Canterbury-based NZFOA councillor Kerry Ellem says there is no doubt that forests reduce water yield from streams in rain-fed catchments. The question is, in which catchments and by how much?

"Many of the areas we are talking about are prone to reversion to scrub weeds and second growth bush, which also suck up moisture. But the council cannot legally regulate 'passive reversion'.

"It would be ironic if the council restricted the rights of land owners to plant productive forests, only to have the land revert to unproductive weeds."

For these reasons, and because the rights of land owners are being restricted, it is important that the areas defined as being 'sensitive' are very accurately and closely defined.

"Sound science is essential, but to date the council has ignored the evidence of independent professional hydrologists.

"The Association, along with Federated Farmers, the Farm Forestry Association, Maori and other land owner groups have had very little success in modifying the council's plans.

"The only ray of light was a field trip we organised recently for new E-Can chief executive Brian Jenkins. We flew him into several farms and discussed the effects of the proposed plan at a practical level – the level of the individual farmer or forester.

"We also argued very strongly for the council to set a percentage limit for forestry on a catchment-wide basis, rather than on a per-farm basis. If it is on a per-farm basis, you effectively rule out forestry blocks of a commercial size in the catchments concerned." 🚩

Sunset for Taupo nitrates

Forest owners want to see Lake Taupo protected from nitrate pollution, but are unwilling to 'pick-up the tab' for pollution caused by others.

In recent years there has been growing concern about increasing nitrate levels in the lake, which is renowned for its clear waters. But a draft Environment Waikato/Ministry for the Environment plan to deal with the issue has angered forest owners.

This is because it would restrict the land-use options of forest owners who would also have to unfairly contribute through their rates to the cost of nitrogen mitigation.

"Forests do not contribute to nitrification of Lake Taupo and should not be penalised," says NZFOA president Peter Berg.

According to official reports, streams that drain into Lake Taupo from pine or native vegetation (bush, tussock, scrub) catchments have good water quality.

Streams draining pasture have poorer water quality, with nitrogen being the most important contaminant. Pasture accounts for about 40 per cent of the nitrogen entering the lake.

In the last few decades, the concentration of nitrogen in pasture streams has increased. This is because of the time it takes for soil fertility to build up and for nitrogen to move through the groundwater to streams and the lake.

"Forest owners accept the goal of protecting the lake. We also acknowledge the expectation in the Resource Management Act that

human activity should be within the assimilative capacity of the environment," says Berg.

"The issue we have is that now a nitrate problem has been discovered, foresters are being expected to forgo development at a significant individual cost to meet a community good. We have a responsibility to manage our effects on the environment but should not be penalised for someone else's.

"A fair way to manage this is to allow forest owners to trade the low nitrate status of their forests with those land users whose activities increase nitrate levels.

Together with other proposed measures to reduce the overall level of nitrate emissions – research into lower nitrate farming systems, planting of forests on state owned land, improvements to urban effluent treatment – a trading scheme would provide a fairer transition and spread the burden more fairly.

"Nitrate trading and compensation for the loss of land use opportunities are the only equitable ways to limit nitrate levels. It will allow land owners to adopt commercially prudent land uses while meeting the environmental costs of their choices," says Berg.

"It is all about property rights, which seem to be under threat in a number of areas."

The Association was staggered last year when Environment Waikato and MfE came up with

their draft plan.

"How can it be equitable to compulsorily constrain foresters from considering alternative land uses, regardless of the financial returns from forestry, while other land users are permitted to largely continue to emit large quantities of nitrate to the detriment of the lake?" Berg asks.

"Environment Waikato's proposal seems to turn the polluter-pays principle on its head."


"Forestry is identified as a preferred and sustainable land use in the plan, but the measures proposed are inequitable," Berg says.

"Environment Waikato's enthusiasm for forestry does not seem to extend to wanting to buy up forestry land to ensure the land remains in trees."

Because of Lake Taupo's national importance, Central government should make a much greater financial contribution to reducing the nitrate levels than it has so far indicated it is prepared to do so.

Following a February meeting with NZFOA representatives, officials have agreed to investigate how a nitrate trading scheme could operate.

The NZFOA says whatever is put in place for Lake Taupo is important because it would become the precedent for other similarly affected lakes and rivers.

"The forest industry is keen to work with all parties, including other land users, in finding an equitable way to deal with the nitrate issue," says Berg. 



Everyone wants to see Lake Taupo protected from nitrogen pollution, but the cost of doing so should be carried by polluters – not foresters

Environment Waikato figures show that the same amount of land around Lake Taupo is used for plantation forestry as for pastoral farming.

But a three year process of consultation with farmers has only recently been extended to specifically include a forest owner's perspective, though Government argues that foresters have had the opportunity to be involved at any time.

Hopes for power line deal

Land owner groups are eager to reach agreement with Transpower on the terms of a standard easement which will apply where power lines cross farms or forests.

The establishment of a model easement agreement is long overdue. The fact that it doesn't exist is a legacy of the days when power generation and distribution was a responsibility of the state.

"Power line corridors pose major costs and risks for land owners and, in the absence of easement agreements, are the focus of ongoing conflict with line companies," NZFOA chief executive Rob McLagan says.

Last month the Association and other land owner groups met with Transpower to discuss the terms of a standard easement agreement to apply wherever the company's power lines cross private land.

The meeting was prompted by Transpower, which is about to embark on a major expansion and upgrade of its network. The utility says it recognises the need to consult with land owners and to "negotiate compensation with the land owner" where transmission works "impact adversely on the value of the land which they cross".



Land owner groups want an easement agreement which covers both existing and new lines

McLagan says land owner groups want an easement agreement which sets out the responsibilities of both parties in respect of both existing and new lines. It is thought that existing lines cross about 8000 properties.

"The agreement will take the form of a template – land owners will be free to use this agreement or negotiate one of their own with Transpower," he says.

"Land owner groups are expected to use an NZFOA draft as the basis for the standard easement agreement. This will be tabled with Transpower shortly.

"The Government has made it clear that the right to establish corridors was implicit in legislation when the power line companies were public utilities.

However, utility companies now need to negotiate arrangements with land owners if they wish to widen an existing corridor or establish a new one." ■

New regulations of limited help

New Government regulations will help resolve some issues associated with trees and power lines, especially on residential sections. But they're not much help to forest owners, according to the NZFOA.

The Electricity (Hazards From Trees) Regulations 2003 were gazetted in December, with the aim of promoting safety and helping prevent power outages and fires caused by problems with trees and power lines.

Energy minister Pete Hodgson says the regulations define safe separation distances between trees and power lines and specify who is responsible for ensuring the clearances are maintained.

However, NZFOA chief executive Rob McLagan points out that they don't address access

and damage restoration and other issues of concern to commercial foresters.

"Many forests are crossed by power lines. The corridors associated with these lines present a host of problems including vegetation and pest control, fire risks and safety issues.

"For this reason, it is important for forest owners to negotiate an equitable easement agreement with line companies, starting with Transpower."

Under the Electricity (Hazards From Trees)

Regulations, land owners can declare an interest in particular trees on their land that grow near power lines.

If they do so, the line company is obliged to give notice when the designated tree or trees needs trimming. The land owner is then responsible for the cost of trimming, except for the first trim under the new regulations, which will be paid for by the line owner.

Where land owners declare no interest in their trees, all cost and responsibility for trimming or removal falls on the line owner.

A detailed summary of the regulations is available on the Ministry of Economic Development website. ■

Right turn for log truck safety

New log truck safety initiatives are showing impressive results, despite a dramatic increase in the number of kilometres travelled, often in difficult road conditions.

"No rollovers have been reported of the new longer (22-metre), lower loads," Log Transport Safety Council (LTSC) secretary Bruce Nairn said. Permits for these loads, designed to be more stable, have been issued to 50 per cent of operators.

In 2003 the industry recorded 49 on-highway rollovers, most caused by travelling too fast for the conditions. None involved 22-metre trucks. This compares with 46 rollovers in 2002.

However, Nairn says the figures reflect significant driving safety improvements. "The truck fleet has doubled, and there has been a

huge increase in kilometres travelled, many of them in isolated and difficult areas."

LTSC figures show that in 1997, when log trucks were travelling just over 20 million km a year, there were two rollovers for every million km driven. By 2001, when the Log Transport Safety Accord was signed, trucks were covering 70 million km, with one rollover per million km.


In 2003, trucks travelled 120 million km, a 600 per cent increase over 1997, but there was only one rollover every 2 million km.

In line with increased truck movements, more calls are being made to the 0800 number to

report driver behaviour. But only 20 per cent of these now relate to careless or inconsiderate driving, and more calls about good driving are coming in.

"Many calls about inconsiderate driving relate to drivers not pulling over and letting the motorist past," Nairn says.

"As an industry, we have not encouraged our drivers to pull over unless there is a passing bay or passing lane available. We know many rollovers have occurred after drivers pulled to the roadside 'to do the right thing.'"

He says issues of concern, including the requirement for 22-metre loads to have flashing lights, which other operators find confusing, will be discussed by the LTSC shortly, along with a minimum code of practice for all forestry transport. 

Better road framework

District councils and forest owners may hold a joint workshop to discuss roading standards and funding.

This follows publication of the Frame Report, which revealed many forest owners were being forced to pay twice for their share of district roading costs.

All forest owners pay rates during the growing period of the forest, then – despite making less use of the roads than most other users – are increasingly being asked by councils to pay for road upgrades at the time of harvest.

NZFOA chief executive Rob McLagan says this is because councils have spent rates collected from forest owners on priorities other than roading.

The report by Frame Consultants, *A Review Of Issues Relating to the use of District Roads for the Transportation of Forest Harvest*, makes a number of constructive suggestions for reducing the costs of road upgrades.

These include laying slightly stronger pavement when roads are constructed or have a major overhaul. This can cut lifetime maintenance costs, the report says.

When communities work together, there are traffic management options like scheduling log trucks to avoid 'rush hours' that


occur before and after school.

More use can be made of the radio communications that most log trucks are equipped with. In one example, a school bus was given its own radio so it could join the communication about what vehicle was where on a narrow road.

Many of these approaches will benefit the

wider community, and other rural road users like milk tankers.

NZFOA chief executive Rob McLagan and Local Government New Zealand (LGNZ) chief executive Eugene Bowen have explored the possibility of holding a workshop under the aegis of the Wood Processing Strategy (WPS) transport working group.

It would involve representatives of the forest industry and district councils, especially roading engineers. 



Forest owners make little use of public roads while a forest grows, but pay the same rates as other land owners

High visibility success

A strong focus on safety by the Forestry Industry Contractors' Association (FICA) is paying off.

Overall awareness of safety best-practice has been raised, with good operators taking advantage of opportunities to make further improvement.

FICA has safety projects in several areas, including cable yarding operations (see below). Measures to improve visibility of workers feature highly among the projects undertaken.

NZFOA Health, Safety and Training Committee chairman Sheldon Drummond says use of high visibility safety clothing by workers has been one of the major successes, with the new jackets often being worn in the street as well as on the worksite.


The industry has developed a strong focus on employee safety. Other developments are protective boots, cut-resistant lined trousers and

safety helmets. These are "now seen at every skid site," Drummond says.

With "every tree posing a different challenge" for forest harvesters, education and training in best-practice guidelines is also a very important component of safety.

He says the safety indicator system, developed by the industry, analyses accident reports to provide individual company and plant safety records.

"People can now find out how well they are doing compared to the national average, and see where they need to improve.

"The more we get to know our way round the data, the more we can target where safety improvements need to be made, and how this might be done." 

Tower hauler standard

A best-practice guide to cable yarding is the result of two years of collaborative work by industry groups determined to enhance safety and reduce accidents.

Cable yarding, or tower hauling, involves most of the hazards that have made forestry a potentially dangerous occupation: multiple interactions between men and large, powerful machinery, often on difficult land, in situations where it is impossible for all team members to see each other.

The process involves extending steel ropes, sometimes up to 500 m long, from a central hauling tower.

Initially created by an industry working group, the guidelines booklet was produced by Forest Industries Training (FIT). It is being promoted jointly with the Forest Industry Contractors Association (FICA) and the NZFOA. FICA chief executive John Stulen said the booklet has helped contractors to focus on completing effective safety inspections of cable yarders, looking

specifically at maintenance issues.


"Many operators have told us this change in practice has enabled them to pick up wear and tear *before* something becomes a potential hazard to their machine."



Stulen said there has been industry-wide support for the project. "Many of our insurers have brought together some great information, including maintenance logbooks for the contractors."

"Aspects of the guidelines are now filtering through into harvesting contracts, so that the less conscientious operators are weeded out," he commented.

Contractors can now draw on the expertise of a small but growing group of certified tower inspectors, who have completed unit standard 19722. This unit standard is available through FIT, and copies of the best practice guidelines are available for purchase from either FIT or FICA.

More? Contact John Stulen on 07 921 1382 or email johnstulen@clear.net.nz 

Employment bill worrying

The Government's Employment Relations Law Reform Bill is of great concern to forest owners, says NZFOA executive director Rob McLagan.

"As everyone knows, the export sector is under acute pressure because of a weak US dollar.

"There couldn't be a worse time to introduce legislation which is likely to cause industrial disruption and erode the competitiveness of the industry.

"It is very difficult to reconcile the provisions of the Bill with the Government's growth and innovation, and wood processing strategies."


Mr McLagan says his members also have strong concerns in principle with many of the provisions in what is a very technical Bill.

"It appears to be introducing compulsory unionism by stealth. Employees may be effectively compelled to join a union if some of their colleagues do, and employers may be forced to comply with multi-employer collective agreements (MECA) to which they are not party."

Failure to conclude a collective agreement – unless there is a genuine reason not to – will represent a breach of good faith. At present the good faith concept relates only to the way collective bargaining is carried out and does not require the parties to conclude a collective agreement.


"Very disturbingly, the Bill requires an employer to keep bargaining even when he's reached his bottom line."

"For those of us who remember the industrial disruption of the 1970s, this is like a bad dream. It's as if the Government wants us to repeat the mistakes of the past."

Mr McLagan says the Association will be supporting Business New Zealand's submission on the Bill, which will shortly be considered by a Select Committee. 

Briefs

Aus timber 2004

The Austimber international conference and exhibition for 2004 is being held in Albury, NSW from 29 March-3 April. For details, contact Ron Limb, Tel +61 3 6248 5653, Email info@austimber2004.com, Website www.austimber2004.com 


Who owns what

Up-to-date maps showing the location and ownership of New Zealand's major exotic forest holdings have been produced by Forest Research, based on information provided by forest owners.

The project was commissioned by MAF to assist with infrastructure planning, forest health monitoring and regional development.


The maps display around 1.6 million ha out of the country's 1.8 million ha of exotic forests. To fill the gaps, MAF and AgriQuality are now running regional surveys of small-scale forest growers.

The data is used to upgrade information contained in the existing National Exotic Forest Description (NEFD) reports.

Maps covering the North and South Islands are available as PDFs on www.maf.govt.nz/statistics/primaryindustries/forestry/forest-resources. Because they can be printed only on a large format (A1 or A0) printer, Forest Research can supply printed maps for \$15 (plus postage and GST). Contact: andrew.dunningham@forestresearch.co.nz 

Australian strategy

The Australian government and forest industry have re-launched *2020 Vision*, a strategy which was originally intended to treble the continent's plantation area to three million ha in the period 1994-2020.

Since 1994, the planted area has grown to 1.5 million ha. Taking this to 3 m ha will require the spending of \$5 billion on new plantations alone. 

Parsnips versus pines

What does *Pinus radiata* have in common with a parsnip? Almost everything. All members of the plant kingdom are very close genetically, and some of the most notable differences result from slight variations in how the genes are expressed.

It follows that findings about fast-growing plants can provide valuable information for forest researchers. This is the thinking behind MeriNET, a nationwide collaboration between scientists working on all types of plant growth and development. It takes its name from the meristem, the growing point of every plant.


Kathy Horgan, a senior Forest Research scientist, says she has learnt through MeriNET workshops about switching on and off genes controlling flowering in maize and *Arabidopsis* (a model plant with well-researched genetic information).

Horgan says if we could get forest trees to "flower on command and on command only" we could achieve faster breeding cycles and faster responses to changing



A dream of trees that flower on command

market requirements for specific wood properties.

"One dream is to be able to induce early flowering in propagules from our special breeding population of trees so that we don't have to wait from six to 14 years before they flower and can be bred together. Another dream is to prevent commercial forest trees from flowering at all and to redirect the trees' energy flows into forming more wood." 

Forest data invaluable

It has been likened to a statistical 'gold-mine' by wood processors and is hopefully seen as such by district councils planning their roading upgrades.

It's the National Exotic Forest Description (NEFD) – a statistical database that provides an inventory of our exotic forests, by species, by age class and wood flows by region.

Now in its 20th year, the NEFD is probably more important than ever, says chairman Bill Studholme.


"Collaboration between forest owners who provide the raw information and MAF, which processes the data, makes it possible. It's a true private-public partnership in which both parties pull their weight."

The NEFD committee is made up of four government and four NZFOA representatives.

Studholme says the accuracy of the description is constantly being improved through the adoption of modern technology, such as aerial and satellite surveillance. But the core data still comes from forest owners representing 80-90 per cent of planted forest area.

"It has been suggested at times that the NEFD should be expanded to include detailed economic modelling. However, we believe our main role is to provide accurate accessible basic data.

"This can then be used by others to do modelling for their own purposes."

For a copy of the 2002 NEFD, visit: <http://www.maf.govt.nz/statistics/primaryindustries/forestry/forest-resources/national-exotic-forest-2002> 



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