

# Bulletin

Autumn 2022

## SLASH PILE MONITORS WARN OF SPONTANEOUS COMBUSTION P8



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Approval at last on EDN fumigant



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Automation project for silviculture



### P7

More dirt and less slash from East Coast storms





# Facts and fables

There's a lot of upheaval at the moment. The government has an agenda for doing things differently. And the unusual times we live in have accentuated the need for change.

## When Covid first hit, the government carefully analysed how to dig our economy out of the export earnings hole left by the collapse of tourism.

The first conclusion was to back the food and fibre industries where we have a competitive advantage and a history of being innovative and world class. Any reset of these pillars of the economy moreover needed to be more aligned with the land and water that gave rise to it – something to fit with a better world.

The estimated collective potential of the industry to earn credits was inspiring at a time when inspiration was sorely needed. By 2030, the primary sectors are seen as capable of delivering an additional \$10 billion a year in export earnings.

Forestry, horticulture and seafood (read aquaculture) are contribution standouts – \$7.4 billion from relatively limited areas – three quarters of the total.

The much spatially larger pastoral sector – primarily sheep and cows – has less potential, but still a combined significant \$2.1 billion extra per year.

For forestry, the increase is through realising the potential via the Forest Industry Transformation Plan. That means more processing in New Zealand and exporting fewer logs. It also means using the hitherto low or no value parts of a tree in the emerging bio-economy.

A market driven dairy industry transition to using wood to fuel their milk powder plants will alone consume huge volumes of wood previously left on the ground.

# \$7.4b

OF \$10B IN EXTRA IN PRIMARY EXPORT EARNINGS BY 2030 IS NOT FROM THE PASTORAL SECTOR

An emerging bioeconomy will use wood to replace fossil-carbon plastics.

The government is supporting all of this, most recently through a major project to mechanise and automate the silviculture component of the industry (see page 5) on top of current work to do the same on skid and log sorting sites

As well, the government has backed a much awaited and high technology breeding programme, run by Scion (see page 6) which will in effect create sub-species of *Pinus radiata* which are geared to specific environments, such as summer-dry landscapes increasingly marginal for livestock production as climate change cuts in.

MPI has also teamed up with the Forest Growers Levy Trust for a major industry promotion “It’s Time for Wood”, which will show off the exciting developments in our industry.

It bears repeating as well, that early last year the Climate Change Commission budgeted an additional 380,000 hectares of exotic forest planted in New Zealand by 2035 to meet our greenhouse gas emissions.

Forestry’s important job has brought a lot more attention, but generated misunderstanding and myth as well.

Maybe you knew that;

- There is more indigenous biodiversity in New Zealand plantation forests than on New Zealand farmland
- Forestry employs more people per hectare than sheep and beef farming.
- All overseas investors in forestry must commit to producing timber from their trees (plant and leave is not an option)
- Most forestry in New Zealand was planted too early to earn credits, but has full liability if not replanted
- Most production forestry in New Zealand operates under the international, independently audited Forest Stewardship Council.

And what’s more the demand for wood products worldwide, over the next 30 years, is according the Australian Prime Minister recently, set to quadruple.

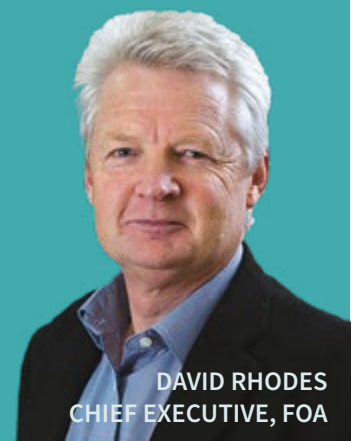
So, the government backing of this horse appears well justified. Trouble is, the government now wants to harness the horse and, in doing so, it is going to walk a very precarious line.

Agreed, we don’t want productive land becoming unproductive and we do want to protect the existing and emerging industries and workforce that rely on a steady flow of fibre and we do want appropriate rules applying to all types of forest.

But some suggestions do not make sense and run a real risk of preventing forestry doing the job it is being asked to do. It is suggested, for example, that resource consents are to be required for new planting on land classes on which a quarter of our current estate already grows with no apparent problem. This restriction is for no better expressed reason than it was promised in the previous election campaign.

Such constraints will frustrate landowners unnecessarily and restrict the ability of the primary sector to collectively become Fit for a Better World.

Forestry isn’t a sector that needs corraling. It feels instead like a sector that’s in the right place at the right time.



DAVID RHODES  
CHIEF EXECUTIVE, FOA

# When reporters get it wrong

TVNZ's flagship *Sunday* programme is celebrating its 20 years on air. On 20 February it ran an attack on 'carbon forestry'.

**The reporter, Tamati Rimene-Sproat emphasised to FOA before filming began that *Sunday* would be more thorough than TV3 was the month previously when it made a number of unfounded claims against exotic forestry in general.**

FOA understood from Rimene-Sproat that *Sunday* would not be repeating the error that overseas investors could get approval for carbon farming and *Sunday* would make clear the distinction between production and carbon forests.

Unfortunately, while the reporter did make that forest type distinction initially clear, the item went on to repeat the completely wrong statement that the very same East Coast station, identified in the TV3 item, was going to be an overseas investment carbon farm.

**“ Tamati Rimene-Sproat (Sunday reporter):** “This place is Huiarua Station. A 5000 Hectare sheep and beef farm, set to be converted into a carbon farm by foreign owners, pending approval from the Overseas Investment Office.”

The item later showed pruned stems in a stand which the reporter claimed was a carbon forest.

Rimene-Sproat cited MPI statistics of 800,000 hectares of new exotic planting since 1990. He didn't spoil a good statistic by acknowledging that by far the majority of this was planted in the 1990s and that in most of the past decade deforestation has exceeded new planting.

The transcript of the item also included this sequence;

**“ James Shaw:** “There are a number of ministers and ministries that are looking at different parts of the problem at the moment.”

**“ Tamati Rimene-Sproat (Sunday reporter):** “He is considering a temporary pause on full farm conversions ....”

The quoted minister, James Shaw met with the FOA executive on 9 March, and was asked about his quoted consideration of banning whole farm conversions.

“Did I actually use that exact language, or was that how I was reported? Within the context of permanent exotic plantations, i.e. not plantation forests, the Labour Party went into the last election with a promise to have a consenting regime in place for land classes [1-5], which we are currently working through. That, I think, is what I would have been talking about, which may have been reported in a different way from that.”



RIMENE-SPROAT CITED MPI STATISTICS OF 800,000 HECTARES OF NEW EXOTIC PLANTING SINCE 1990. HE DIDN'T SPOIL A GOOD STATISTIC BY ACKNOWLEDGING THAT BY FAR THE MAJORITY OF THIS WAS PLANTED IN THE 1990S AND THAT IN MOST OF THE PAST DECADE DEFORESTATION HAS EXCEEDED NEW PLANTING.

## Full circle for Overseas Investment Act test

**The government is to scrap the Special Forestry Test which the previous Forests Minister, Shane Jones, introduced at the end of 2018.**

Consultation is now on fast track to consider the government's intention to revert back to the 'Benefit to New Zealand Test' under which forest applications were previously considered.

Since the Special Forestry Test came into effect in October 2018 and until the end of 2021, a total of 23,204 hectares of farm pasture has been approved for conversion into production forests.

The Special Forestry Test doesn't allow applications for carbon forestry,

though many in the farming sector – and media – have claimed that such applications are approved.

Though an average area of 7,000 hectares of approvals, during just over three years, is hardly a material threat to the scale of at least 8.5 million hectares of sheep and beef land, the law change does reduce the chance of New Zealand forestry hitting its carbon sequestration target.

SINCE THE SPECIAL FORESTRY TEST CAME INTO EFFECT...A TOTAL OF 23,204 HECTARES OF FARM PASTURE HAS BEEN APPROVED FOR CONVERSION INTO PRODUCTION FORESTS AS AT DECEMBER 2021.

In early 2021, the Climate Change Commission targeted 25,000 hectares of new exotic planting per year by 2035 for New Zealand to get to carbon zero by 2050. The OIO segment is running at nearly a third of that total.

Even if the OIO takes a broad approach to applications under a new regime, the confidence of overseas investors to buy into New Zealand production forests has been reduced.

Treasury, which is the government agency managing the process, says the changes were not a result of approvals exceeding a target – because there never was a target. The changes are because it was considered that the approvals process required improving.

# EDN ok from EPA

It's taken more than five years of process but the Environmental Protection Authority's approval of Ethanedinitrile to fumigate export logs is reasonable, workable and logical. The work now continues for consents at the export ports and approvals from importing countries.

**On 12 April the EPA released the long-awaited Decision-Making Committee approval for the registration of EDN as a fumigation chemical for export logs.**

Stakeholders in Methyl Bromide Reduction and the applicant, Draslovka have invested heavily in the process to reach this decision.

The approval is for EDN to be used at up to 120 grams/m<sup>3</sup> under tarpaulin and shipping container fumigation operations, without recapture of any gas remaining at the end of the fumigation process. Commercial scale testing has indicated that rates lower than 120 grams will achieve the control required of the treatment.

The approval also provides details of records to be maintained, buffer zones, weather conditions and a range of controls for the use of EDN. Importantly, most of these controls and requirements are similar to current requirements for methyl bromide fumigations and are both reasonable and workable.

The decision did not allow fumigation of ship holds nor, interestingly, despite a request from MPI, did it allow EDN fumigation for imports. Applications seeking reassessments to permit these activities are being considered

EDN has the potential to replace methyl bromide for export log fumigation where it is approved by importing countries for inclusion in their treatment schedules.

Methyl bromide has been used successfully in this role for decades and is widely accepted as an effective fumigant.



Any replacement needed evidence to demonstrate its effectiveness to achieve the desired outcomes.

The need for a replacement is due to the well-recognised adverse effect methyl bromide has on ozone, and globally, has been phased out for all but phytosanitary purposes. Methyl bromide is not an easy gas to recapture and recycle or destroy making it increasingly difficult to continue using it for greater volumes of logs and increased requirements to prevent methyl bromide from entering the atmosphere following fumigation. The EPA imposed additional controls on the use of methyl bromide in 2020.

EDN is proven against the pest species of concern on export logs. It does not require recapture and is used in a manner that is similar to treating with methyl bromide.

While EDN is now registered for use in New Zealand on exports, there remain some hurdles to overcome, including the need to

gain importing country approval of EDN as a phytosanitary treatment. Within New Zealand the process of gaining resource consents specific to each export port will have to be achieved.

STIMBR is extremely pleased to have a proven alternative to methyl bromide that is environmentally more friendly and is not difficult or more costly to use, so that the trade in export logs can continue.

MPI talks with the major importers who require pre-shipment treatment – China and India – have been ongoing since 2019. The EPA approval adds new impetus to these negotiations.

While there are other log treatment options for China, India insists on the use of methyl bromide, with a particular concern about potential sires wasp infestation. The quarter of a billion dollars a year log market there for New Zealand has collapsed as a result.

FOA has urged the government to send a ministerial level delegation to India to support the MPI work there for EDN approval.

A number of trade interests have informed FOA of their interest in joining such a delegation.

**Rates lower than 120g**

“COMMERCIAL SCALE TESTING HAS INDICATED THAT RATES LOWER THAN THE 120 GRAMS/M<sup>3</sup> WILL ACHIEVE THE CONTROL REQUIRED OF THE TREATMENT.”



# Machines advancing on silviculture target

The way we grow pine seedlings and plant them hasn't changed since the early mass plantation forest plantings nearly 100 years ago.

**But Precision Silviculture, a \$10.2 million Sustainable Food and Fibre grant through MBIE, has just been launched to mechanise the life of seedlings and give a better start to the resulting trees, more accurately space them and record their individual development.**

Pruning and thinning are in the joint venture with industry project as well.

The project follows the Steeplands Harvesting programme and its successor Forestry Work in the Modern Age – Te Mahi Ngahere I te Ao Hurihuri, which started in 2019, as a \$29.36 million investment over seven years to increase the use of mechanisation and robots in handling and sorting logs.

The lack of labour for forestry is a major driver of Precision Silviculture. Vineyards and orchards compete strongly for nursery workers in particular. Alternatively, mechanised lifting of seedlings and automated grading, trimming and packing gives the nursery operator the opportunity to automatically fine tune the record keeping and observations on seedling growth, nutrient status and disease.

The machines can also keep a close electronic eye on weeds. Herbicide control can be targeted to the particular weed species and growth stage and so less spray is used.

Mechanising the planting stage is a greater technical challenge. Mechanised and semi-mechanised planters have been used overseas for decades. But adopting a machine which can cope with the tough slopes typical of our forestland is harder to achieve.

In the meantime, an electronically guided 'smart spade' will guide the human doing the planting to a consistently more precise seedling spacing. Guesswork is gone.

Gel packages will give the seedling a more resilient start in dry weather and expand the planting season, a long-standing bottleneck to localised rapid expansion of forest blocks.



Pruning technology hasn't changed in 100 years either. Pruning loppers and ladders are better than in the past, but the job is still hard manual work. Battery powered pruners are a next first step, but in the longer term the aim is to build a machine which climbs the tree to a set height, above where a ladder can safely go if necessary. It will then trim branches with a hydraulic head and, just like with machines in the nurseries, it will then keep records of the state of the trees, but this time down to the individual tree itself.

A successful introduction of this technology would encourage more foresters to prune

their trees and so increase the supply of higher value pruned timber.

Thinning surplus trees is one area where the technology has improved over the years. It's gone from axes to increasingly safer and more powerful chainsaws. The first development here is electric chainsaws with electronic cut-off devices to further improve safety.

But again, the longer aim is to mechanise the process fully. A machine can potentially not only thin the stand but sort and collect the thinnings for increasingly valuable process-wood extraction.

Using remote information and recorded data, which may go back all the way to the machines in the nursery stage, the thinning machine operator can fine tune the selection of which trees to leave and which ones cut down.

Precision Silviculture will not eliminate the silviculture workforce nor their skill sets. What it will do is give those same skilled professionals more eyes in and above the forest and integrate their particular work area more closely into the whole forest chain of activity.



Henry Fear showing off the smart spade at the launch of Precision Silviculture, Rotorua, May 6<sup>th</sup>



# Remote sensing a new key to tree breeding

Dramatic improvements in the range and resolution of remote sensing are to be harnessed with genetics to breed pine trees for specific locations and uses.



Dr Michael Watt

**Seeing the Forest for the Trees: Transforming tree phenotyping for future forests, is a five-year Scion-led project with \$9.6 million funding from MBIE.**

Researchers will use mostly drone-based sensors to detect phenotypic differences in individual trees and combine the results with existing datasets of radiata pine genotypes so they can identify where particular genetic lines should be planted.

The project is targeting three traits of; carbon sequestration, and resistance to both drought and to disease. The breeding selections will be from among more than 100 clonal lines in more than 100 trial plots around New Zealand, some of the plots are quite large.

Scion has been using phenotypic and genotypic information for some time to select trees with the fastest growth rates and best form, and then breeding from these known genetic lines.

According to Scion Principal Scientist Michael Watt, using more sophisticated remote sensing technology can analyse data from more trees in a fraction of the time.

This high-throughput analysis will let foresters match tree genotypes with desired traits to a given site under current and anticipated future climates.

One tool is thermal imagery which can precisely assess a tree's stress levels during a dry period by measuring the degree of stomatal opening.

"Thermal imagery is very sensitive at picking up drought stress," Michael Watt says.

"Say you've got a trial on the East Coast of the North Island, which is very susceptible to drought, and you scan that and you find that there's a clone that does really well under that drought."

"Maybe one clone in a very dry location does quite well, but another clone goes better in a moderately dry location, but not so well in the very dry location.

By combining this information, you get a matrix of where each clone should go."

This type of analysis will then be repeated using different forms of remote sensing for carbon sequestration and disease resistance.

"These data will then be used in a genetic analysis to develop a fine-scale map of New Zealand that shows where each of the main genotypes could be planted to get the best overall productivity and resilience for radiata pine".

"We do know that we could get an increase of 20 percent in plantation productivity and carbon capture under the current climate, if we grow the right tree in the right place. So, there is quite a bit of additional productivity at stake that you could get out of this."

Michael Watt says he would expect the results at the end of five years to be rapidly commercialised.

With emerging large-scale clonal replication technology developing at a rapid rate the previous long wait of up to decades for bulking up seed sources ought to be shrunk to a matter of months.

The research will mostly focus on radiata pine, the predominant plantation forest species, and currently the tree of choice for carbon farming as well.

But Scion will also explore how Māori select and value trees for cultural purposes (e.g. whakairo – carving, rongoā – medicine, fragrance, food flavouring, and gifting).

Codeveloping a hapū-level framework for culturally phenotyping tōtara and kauri cultural traits will project what Māori value in taonga species into future forestry research.

The project team will leverage the methods developed for radiata pine and will develop specialised remote sensing indicators for this.

## Increase of 20%

"WE DO KNOW THAT WE COULD GET AN INCREASE OF 20 PERCENT IN PLANTATION PRODUCTIVITY AND CARBON CAPTURE UNDER THE CURRENT CLIMATE, IF WE GROW THE RIGHT TREE IN THE RIGHT PLACE"



# East Coast floods hit pasture and river riparian - exotics hold

The storms and floods in Tairāwhiti in late March and April 2022 made as many headlines as in 2018 when the debris floods at Tolaga Bay captured the media’s attention.

**This time, the press again predictably tried to find as much forest slash built up against bridges and on beaches as they could. But the stark evidence for the real devastation was on display on so many hillsides throughout the region. Pasture cover had given way on a scale not seen since Cyclone Bola in 1988.**

Indeed, some mature exotic trees were lost in the storm, but an aerial survey of forests in the area has shown these losses are infrequent and isolated, as they were of land with an indigenous tree cover.

Much of the exotic forest slash that did find its way downstream appeared to be a number of years old, rather than from harvesting recently.



**Coastal hills just north of Tolaga Bay**

The devastation on hillsides caused by intense rain is not confined to any locality in the Tairāwhiti region. Well known as highly erodible by any standards, the continuing use of pastoral agriculture on much of this land must be called into question. Not only is the region the nation’s most vulnerable to increases in drought frequency brought on by climate change, but so too it appears to be at high risk of more severe storms.



**Stream bank willows and poplars contribute to woody debris throughout the region.**

Willows and poplars have contributed to the woody debris throughout the region as stream banks gave way despite the plantings. This appears to have been similar to the piles of willows and poplars debris from eroded farmland left on the Ashburton Beach in the South Island after the floods there a year ago.

At media urging, Gisborne City is investigating the type of wood material left on its local beaches, to see if it can make a case to prosecute plantation foresters for resource consent breaches leading to the debris deposits.



**New slash trap in northern Hawke’s Bay**

Installing slash traps has been a major lesson from the 2018 floods, especially working as a catchment-wide system. A catchment may include forests owned by different companies, which means owners need to coordinate their plans and work together.

The traps may not look pretty, but as can be seen here, they do capture logs and other debris which have not been held on the slopes, and prevent that slash going further downstream to potentially cause damage. The slash can be safely removed from the traps when the flood subsides.

However, a currently slow resource consents process for approving these slash traps is delaying their installation in the region.



# Satellite heat probe reduces fire risk in slash piles

A heat probe developed by Scion is proving its value in remotely monitoring harvest slash piles for the risk of spontaneous combustion.



Dr Richard Parker

**Christchurch-based Scion scientist Richard Parker says the idea wasn't that complex. The problem was the hidden danger of spontaneous combustion in a slash pile, which may have been sitting quietly, then suddenly catches fire. A heat reading probe set into slash piles that can be remotely monitored was the answer.**

The probes were developed by the Fire and Atmospheric Sciences Group in Scion in conjunction with Christchurch company inFact Ltd.

Scion and inFact had previously developed monitoring technology to monitor wildfire movements, so it was modified for doing a similar job in slash piles.

"The beauty of the probes is that you can monitor them from your computer, or your phone and it's giving you a new signal about once an hour," Richard Parker says "So you can check if the temperature is rising or falling. That's the important aspect of it."

The science of spontaneous combustion in slash piles is now better understood, following a Scion investigation.

Grant Pearce, then also working with Scion, was part of a team trying to establish why moisture in the pile actually increases the risk of the pile catching fire, rather than lessening it. Autumn rain makes the main risk period.

The heat was coming from bacteria breaking down the slash – just like in a compost heap.

"It's the green needle material that can add to the decomposition, as opposed to the really large branches and stumps," Grant Pearce says.

Soil in the slash pile adds to the risk, enhancing the decomposition and soil can also trap the heat inside the pile.

"It gets to the point that the heat cracks it and starts to open up and get the air flowing which can then ignite that material. There's a sequence happening here."

"For months, it might be fifty, sixty degrees and gradually build up to sort of eighty degrees and then it'll really take off so quite quickly."

Grant Pearce says removing slash off slopes is likely to have increased spontaneous combustion occurrences, and a lack of experience in some forestry crews in knowing how to make safe piles could be a factor.

And while knowledge from the probe monitoring will build up more knowledge of what pile management factors increase or reduce the risk, the main immediate lesson from the research is to keep the height of the piles below three metres.

For Wenita forester John Kerr (to the right on the front cover), the probe was 'just about perfect' as a solution for a problem Wenita was having in Otago forests.

To make sure that slash on the slopes wasn't going to slip into the streams below, his crews had been pulling volumes of slash safely up onto the flat skid site where they were secure.

But removing that risk, as it turned out, caused an unanticipated consequence. Some of the slash piles on the skids began to spontaneously combust.

Something had to be done. But the answer wasn't as simple as opening up all the piles and spreading the slash.

Opening a threshold pile was likely to just let in oxygen and start a fire before the pile could be dealt with.

'I thought maybe we could try an infrared camera. That might show the risk in each of the piles', John Kerr thought, "This is the 21st Century, there's got to be a way somewhere'.

He contacted Richard Parker, Grant Pearce and Veronica Clifford at Scion and satellite probes were quickly delivered south.

John Kerr now can not only monitor satellite probes for risk of pile cores getting dangerously hot, but he carries a mobile probe in the ute too.

"It means I can check any slash piles anytime. This one's a bit flimsy though and so it's getting a bit bent, so I'm looking forward to getting a more robust model soon."

He says the probe has all sorts of potential outside forest slash piles. He says sawmillers are interested for their sawdust piles and he can see it being useful in hay barns.

**Richard Parker says**  
*"The thing about this project is it's doing what we're supposed to do. It's solutions to industry problems and working closely with them. To go down there and help these guys and over a beer afterwards you discuss all the issues and it's nice."*





# Wetland Restoration in Kinleith Forest

An estimated ninety percent of New Zealand wetlands have been drained out of existence since European settlement began.

**Recognition of the ecologically critical environment of wetlands has made their restoration in the Kinleith Forest a priority for Manulife (formerly Hancock Forest Management) for the past fifteen years.**

The lack of need to actively drain plantation forestland and the aversion on the other hand of most plantation tree species to wet feet, means that wetlands are typically left alone and well represented in plantation forests.

Kinleith Forest in the Waikato Region is no exception. An ecological assessment of reserve areas in Kineith in 2000 identified 80 significant wetlands totalling 500 hectares. These wetlands ranged from small and willow infested hollows to regionally significant wetlands of larger than 50 hectares.

Given the importance of these ecosystems, wetland restoration in Kinleith Forest has been a priority for Manulife.

The main focus has been to remove pest plants. Grey willows and blackberry creepers are the worst weeds. If they are left unchecked they eventually take over the wetland and out-compete indigenous species for access to sunlight and water.

Willow and blackberry have been controlled using a combination of ground spraying, cutting and stem pasting, along with aerial spraying in heavily infested areas.

Once the willow canopy is removed the indigenous plant species rapidly re-colonise and restore the natural wetland habitat. Unfortunately though, willow and blackberry are persistent and not easily defeated. Ongoing ground-based treatment is required to knock back regrowth until a thick sward of replacement native vegetation is achieved.

Manulife's largest wetland restoration project in Kinleith has been the 45ha Opareiti Wetland south of Tokoroa. With initial funding assistance from the Waikato Catchment Ecological Enhancement Trust, Manulife has undertaken plant pest control over a number of years to restore the native plant communities.

Opareiti now provides for a healthy range of wetland indigenous bird species including North Island Fernbirds – Kōtātā and Spotless Crane – Pūweto.

The numbers of both birds nationally have been severely reduced over the years by the destruction of their wetland habitats.

At Opareiti, and the other most significant wetland restoration at Lake Rd, the programme of predator control of the possums, rats and mustelid population further protects these wetland birds.

“Wetlands act like the kidneys of the earth, cleaning the water that flows into them. They trap sediment and soils, filter out nutrients and remove contaminants; can reduce flooding and protect coastal land from storm surge; are important for maintaining water tables; they also return nitrogen to the atmosphere. In the past, those soggy areas of land were often drained and ‘put to better use’ but now we know they are essential and one of the world’s most productive environments. In New Zealand they support the greatest concentration of wildlife out of any habitat.” DOC, Reference

<https://www.doc.govt.nz/nature/habitats/wetlands/>

## Opareiti Wetland

Time sequence **2009-2014** showing the successful control of the grey willow canopy and regrowth of indigenous wetland species



Time sequence **one**



Time sequence **two**



Time sequence **three**



# Forest aircraft a valuable tool for fighting wildfires

A survey on the availability of aircraft within the forest industry has revealed a vital, extensive and capable standby capacity for fighting wildfires in and near plantation forests.

**The use of aircraft in the management of plantation forests in New Zealand is vital for the health and wellbeing of those forests. Aircraft are used in: land preparation, insect control, release spraying, spreading fertilizer, seeding, aerial lifting, and fire-fighting.**

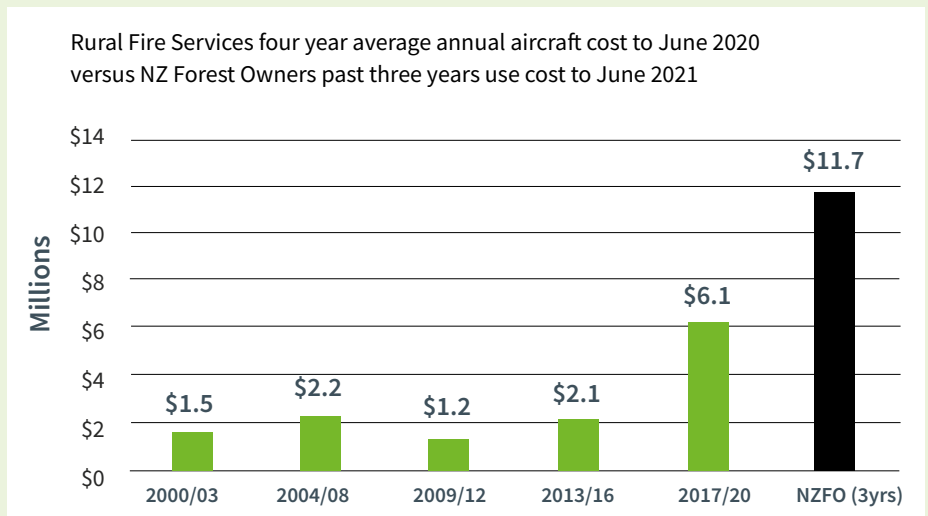
A recent Forest Industry Aircraft Use Survey has revealed a national picture of annual day to day forest aircraft expenditure. This information illustrates proficiency levels in managing aerial operations within the industry.

In January, the NZFOA/FFA Fire Committee Chair, Sean McBride, asked all major forest owners to complete a Forest Industry Aircraft Use Survey. A total of 1.2 million hectares was covered, with 60 percent so far responding.

These owners reported an average annual cost of \$9.77/ha. This has been used to give a current indicative figure for the total 1.2m hectares of forests.

Forest area for stakeholders who submitted survey form	723,358 Ha
Total Three Year expenditure	\$21,191,889
Three Year average cost	\$7,063,963
Survey Cost per Ha	\$9.77

Forest area for stakeholders who have yet to submit survey form	476,267 Ha
Estimate – Ha @ \$9.77 per Ha	\$4,651,005
Estimate of Total Annual Aircraft Expenditure by major Forestry Stakeholders	\$11,714,968



The survey has not included small forest owners, which, if included, could make the annual expenditure on aircraft used by the forestry sector more than \$15 million per year.

This aircraft study has also shown the sector has staff with the skills to ensure aerial operations are managed safely and effectively.

Fire and Emergency New Zealand has also increased its aircraft use since 2017 in the management of rural wildfires.

Aerial fire-fighting is a risky business. In New Zealand, over the past eight years, four helicopters have crashed fighting fires, killing three crew.

The wildfire fighting risks are similar to the management of aircraft in forestry operations. Aircraft operations must be well managed.

One common element between foresters and FENZ is aircraft managers must demonstrate the attributes of; (a) Leadership, (b) Strategic decision-making, (c) Planning, (d) Situational analysis and problem-solving, (e) Risk management, (f) Interpersonal skills, and (g) Establishing effective working relationships.

A forest sector concern is an additional FENZ requirement that aircraft management at a wildfire must have additional FENZ minimum qualifications. The NZFOA/FFA Fire Committee believes that current competency achieved through managing aerial operations on an operational basis should be sufficient.

Based on the survey evidence, there is a case that should recognise FOA members, who manage aircraft for a minimum of ten hours per year have the required competencies to manage aircraft at wildfires.

These forest managers should meet the requirements for Air Division Commander and Air Attack certification at rural fire events.

The NZFOA/FFA Fire Committee also suggests that ongoing evidence and currency could be shown in a record of learning signed off by the applicant supervisor. The Committee also supports the need for all managers of aircraft fighting wildfires to meet this competency requirement after the initial attack phase of a wildfire.

# Getting ready for the new Log Traders and Forestry Advisers Registration System

From 6 August this year, log traders and forestry advisors operating in New Zealand will be required to register under a new regulatory system being developed by MPI.

## **This requirement is a result of the Forests (Regulation of Log Traders and Forestry Advisers) Amendment Act 2020.**

The registration system aims to ensure logs grown in New Zealand are bought and sold in a transparent and professional manner. Registration will be a legal requirement for any business acting as a log trader and individuals providing forestry adviser services. People operating in these areas should be aware of the benefits of being registered, as well as their obligations, and penalties for not being registered apply from 6 August 2023.

Those required to register under the Act will need to pass a fit and proper person test and comply with regulations and practice standards to support a more transparent and open market for log sales and professional advice. This also aims to provide investors and forest owners with greater confidence in the forestry sector, including in the advice they receive on the management and valuation of their forestry assets.

A log trader is a person, in trade, buying, or exporting logs grown in New Zealand, processing logs they have grown themselves, or a person acting as an agent for another person doing any of those things.

Forestry advisers are individuals who in the ordinary course of business provide advice on one or more of a range of forestry matters. They may also act on behalf of another person in relation to the sale and purchase of timber, or other forestry products, make inspections or prepare reports in connection with a forestry advisory service.

The range of forestry matters covered in the Act includes advice on the establishment, management, or protection of a forest, management or protection of land used for forestry, appraisal, harvest, sale, or utilisation of timber or other forest produce, and the application of the emissions trading scheme to forestry activities.

Te Uru Rākau – New Zealand Forest Service is currently developing the registration system including building the core IT infrastructure and portal for lodging and processing of registrations. TUR – NZFS is developing the online public register, systems for payments and invoicing, customer contact, and information services.

The launch of the registration system will be a significant milestone for the forestry and wood processing sector and the businesses and people who work, invest, trade, and provide advice across the sector. It is step forward in strengthening the integrity of the forestry supply chain and enhancing transparent and openness for those in the sector.

From May 2022, you will be able to register your details as an expression of interest and be emailed a registration link as soon as the system becomes live in August.

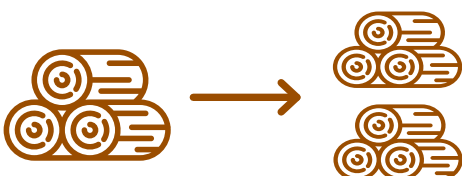
TUR – NZFS will provide updates to the sector and stakeholders in the lead-up to 6 August, and anyone trading logs or providing forestry advice can contact TUR – NZFS for more information.

### Go to:

Registration of forestry professionals | Te Uru Rākau – New Zealand Forest Service | NZ Government ([mpi.govt.nz](https://www.mpi.govt.nz))



<https://www.mpi.govt.nz/forestry/forest-industry-and-workforce/registration-of-forestry-professionals/>





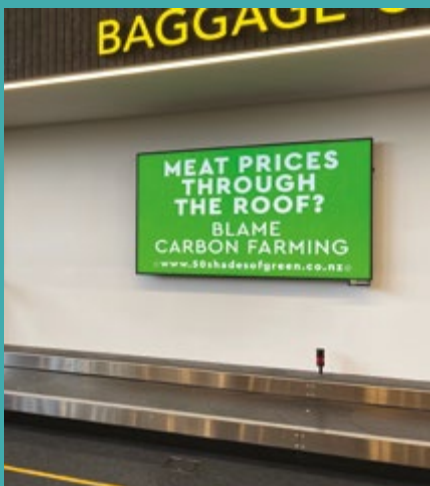
# Advertising Standards Authority finds 50 Shades of Green advert ‘intentionally misleading’

The anti-forestry group 50 Shades of Green has been forced to pull one of its recent electronic billboards after the Advertising Standards Authority found a 50 Shades of Green advertisement was ‘intentionally misleading’.

East Coast Wairarapa based 50 Shades of Green started a new campaign in March against plantation forestry, with one of its electronic advertisements claiming ‘carbon farming’ was responsible for ‘meat prices through the roof’.

The Chair of the ASA Complaints Committee found this advertisement ‘contravenes the advertising standards because it makes a claim that is both not true and misleading, and further that the intention and purpose of the ad is to mislead and misinform.’

The FOA took a complaint to the ASA, stating that New Zealand domestic meat prices were driven by international demand and there was no evidence that any New Zealand forestry had anything to do with it.



### The ASA agreed. It stated;

“The statement is intentionally misleading because it attempts to convince the reader that carbon farming has materially increased meat prices for consumers when it has not, and there is no evidence that this has occurred.

“Further, the statement is an absolute one, when clearly the basis for making an absolute statement is extremely weak. If carbon farming had affected meat prices, it would be one of numerous factors, including global production, global demand, supermarket pricing strategies, profit margins, exchange rates etc.

“No qualifier is given to the statement ‘Blame carbon farming’ which implies that carbon farming should be blamed absolutely and entirely for higher meat prices.

“The billboard has been paid for by an advocacy group, that has no goal other than to advocate for changes to carbon farming policy, hence the intent to mislead is more problematic than if they were selling a product.”

VOLUMES OF NEW ZEALAND MEAT EXPORTS HAVE BEEN INCREASING OVER RECENT YEARS – NOT DECREASING

The FOA argued that, from both extensive media and MPI commentary and from export data, that rising overseas returns determine the prices for the remaining ten percent of New Zealand meat production which is consumed domestically.

Moreover, volumes of New Zealand meat exports have been increasing over recent years – not decreasing.

If the impact of carbon farming, and regular plantation forestry, is as huge as 50 Shades of Green, and others, are arguing, then meat export volumes should be falling.

However, the Meat Industry Association’s 2021 Annual Report celebrated 406,577 tonnes of sheepmeat exports in 2020, the first time in five years that the amount had exceeded 400,000 tonnes.

Even more so for 2020 beef exports, where the MIA stated 480,618 tonnes was a New Zealand all-time record export volume.

The ASA informed FOA that when 50 Shades of Green received a copy of the complaint, they “advised they had removed the advertisement and said they would not use it again in its current form”.



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