FOREST OWNERS ASSOCIATION

Bulletin

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Final Presidential reflections

This is my last column as New Zealand Forest Owners Association President. It has been an honour, an education and an experience I am grateful for.

I'm pleased to share that Dean Witehira, our current Vice President, has been elected as my successor and Sean McBride will step into the role of Vice President. I have every confidence in their leadership as the Association moves forward.

In our last *Bulletin*, we touched on fire season, reminding forest owners to be vigilant in the lead up to summer. But this year, volatile weather, not fire, across the top of the North Island kickstarted the 2026 headlines.

From Northland to the Coromandel, Bay of Plenty to the East Cape, we saw soils give way on agricultural land, residential lots, community spaces and in native forest areas like the Waioeka Gorge; with devastating, dramatic and lasting effects for communities. Media coverage was largely focused on native forest devastation, with only a few missteps linking debris to commercial forestry. Generally, reporters were not as quick to assign blame to harvest operations this time around.

These extreme weather patterns are a continuation of a growing trend observed in the last five or so years that will likely only intensify – and so, climate change and commercial forestry as a land use will likely remain front and centre in the media and on political agendas in the immediate future.

As New Zealand moves towards the 2026 general election, forest owners are navigating not only current regulations but also the signals of what may come next. While only the current government can point to enacted policy, opposition parties are increasingly setting out directions that could influence forest investments, operations and land use decisions over the next parliamentary term.

Across parties, three themes are likely to dominate debate regardless of the election outcome:

1. **ETS stability versus reform, particularly how forestry credits are treated relative to gross emissions reduction**
2. **Land use balance, including ongoing scrutiny of afforestation impacts on rural communities**
3. **Value-added forestry, where there is broad, if uneven, political support.**

For our members, the task isn't to predict a single policy outcome – it's to be ready for continued regulatory evolution and to show that forestry can deliver both economic and environmental value.

The NZFOA team provide a critical policy advocacy role for our membership. Committees like Fire, Environment and Training, to name a few, contribute expertise that ensures government decisions are informed by real-world knowledge.

In 2025 alone, the NZFOA team made 27 submissions on a range of policy changes and legislation. Without this effort, I have no doubt the legislative environment would be a more challenging space for our members and the wider sector.

As I hand over the reins, I do so with confidence in the team and optimism for forestry's future. There's still much work to do, but I leave knowing our members are supported by the excellent work the NZFOA team do on behalf of forest owners.

Matthew Wakelin, NZFOA President

Protecting forestry's resilience amid global crises

Conflict in the Middle East has sparked a global fuel crisis in the past few weeks, disrupting key energy supply routes, which has created a ripple effect across global trade. Both oil and gas supplies have been hit hard.

This has been driven largely by the effective closure of the Strait of Hormuz, a chokepoint that normally carries about 20 percent of the world's oil and large volumes of gas, pushing fuel prices to spike sharply.

The effects are already visible across the globe – fuel rationing, factory shutdowns, power-saving directives and a shortage of cooking gas are realities in many South Asian countries. Countries with limited reserves and high import dependence are facing acute pressures.

Damage to critical energy infrastructure across multiple countries means there will not be a quick fix to the crisis either. Even if shipping routes reopen quickly, it could take months to restore trade flows to previous levels and potentially years to repair damaged facilities. The longer the Middle East conflict continues, the greater the risk of deeper economic disruption, political instability and prolonged high energy costs worldwide.

As an island nation, global energy market fluctuations have a big impact on our little country. New Zealand's primary industries – including forestry and wood processing – are particularly dependent on fuel, especially diesel and natural gas. Forestry's harvesting machinery, haulers and loaders run almost entirely on diesel and log transport relies heavily on road freight. Then there's the bunker fuel for cargo vessels required to power the shipments of log exports destined for overseas markets.

Rural operations in the primary sector generally have limited alternatives to liquid fuel. While electric options are being explored, there is still a lot of work to be done to adapt European trucks and machinery to New Zealand terrain and conditions.

As the global oil shock pushes up operating costs rapidly and unevenly, small and mid-sized contractors are being hit first, especially those with increased distance from ports. While most contractors have fuel adjustment factors in their contracts, the price shock is happening fast enough to still cause cash flow stress to businesses.

Woodlot harvesting has already started to drop off as farm foresters wait for better conditions and as the conflict continues, it's likely that some larger scale foresters will have to reduce or defer some harvest and silviculture activities. At the same time, regions still recovering from recent storms need to

> **Investing in lower-emissions systems such as biodiesel, electrification and rail can reduce our vulnerability to supply disruptions.**

Protecting access to fuel is crucial for ensuring forestry can sustain its

40,000

person workforce while meeting demand for wood fibre.

The longer the Middle East conflict continues, the greater risk of:

Deeper economic disruption

Political instability

Prolonged high energy costs worldwide

continue windthrow salvage at pace to ensure all merchantable timber is recovered before it becomes sap stained.

These operational pressures are being compounded by mounting anxieties over forestry's fuel security. Under Level 2 settings of the *National Fuel Plan* response framework[1], industries deemed to be 'critical customers' are given priority access to fuel during shortages to ensure they can continue to operate or deliver an essential service. The NZFOA and the Forest Industry Contractors Association (FICA) wrote to the Ministers of Finance, Forestry and Trade and Resources in March expressing concerns that forestry was not explicitly recognised as a Level 2 'critical customer', unlike other primary industries. Since the letter was sent, the Government has updated the Plan's settings. NZFOA will continue to work with FICA and the Wood Processors and Manufacturers Association (WPMA) to advocate for forestry amid ongoing changes to response settings to ensure the sector can operate effectively during this period of disruption.

Protecting access to fuel is crucial for ensuring forestry can sustain its 40,000-person workforce while meeting demand for wood fibre. Keeping forestry operating under all Fuel Plan response settings is essential for supporting the regions, supply chain strength and the wider economy.

What's happening now reinforces the importance of diversified energy options and energy resilience in a changing climate. Investing in lower-emissions systems such as biodiesel, electrification and rail can reduce our vulnerability to supply disruptions. Greater use of wood residues for process heat and electricity also stands to strengthen our resilience, with local processing offering an opportunity to add value – but only if the energy supply is secure and affordable.

Investing in a more self-reliant bioeconomy is no longer just about climate or cost – it's about continuity of operations. As we weather this storm, let's work together to invest in systems for New Zealand that allow us to strengthen domestic energy resilience.

Dr Elizabeth Heeg, NZFOA Chief Executive

1. https://www.civildefence.govt.nz/assets/Uploads/documents/publications/guidelines/supporting-plans/National-fuel-plan/SP-04-24-National-Fuel-Plan-Final-2024.pdf

A window of opportunity for forest health

One of forestry's latest initiatives, *Forest Shield*, is now deep in its review of the sector's approach to forest biosecurity.

From the outside, this phase of *Forest Shield* may look like slow progress – meetings, workshops, stakeholder engagement, background research – with little visible change. In reality, this is where the most important groundwork is being done; building a clear picture of what's working well under our current forest health systems, where there may be gaps and where there are opportunities to strengthen our approach.

When pests and pathogens take hold, forest health can deteriorate rapidly. New Zealand and Australian forest industry representatives who visited Spain in 2024 saw firsthand the scale and impact of Brown Spot Needle Blight (*Lecanosticta acicola*) across large, forested areas. They also witnessed how limited response and management options can be once pests and pathogens do become established. Here in New Zealand, the emergence of red needle cast (RNC) has reinforced that our country is not immune to the same pressures, particularly as biosecurity risks increase and climate conditions shift.

Effective biosecurity is not something that can be improvised in response to an outbreak. It relies on clear roles, strong coordination, sustainable funding, internal and external expertise, prevention as the number one priority, but also the ability to detect and respond to threats early. Just as critical is awareness and participation across the entire system. From forest owners and contractors on the ground, to policymakers and the wider public, understanding and minimising the risks is the first line of defence, but then recognising and reporting early signs of change is the next.

Forest Shield was established in response to that reality – a proactive effort, led by commercial forest owners, to strengthen and protect the health of New Zealand's production forests, before their resilience and our systems are tested at scale.

With core structures now established, the project has moved into a critical, if less visible, phase. Governance structures are now in place, with a Steering Group bringing together leaders from across industry, government and research fields. Alongside this, a Programme Advisory Group is contributing specialist expertise to ensure the work is grounded in both science and practical experience.

In recent months, the focus has been on completing a comprehensive review of New Zealand's current forest biosecurity system. This is deliberate.

A key part of this phase will likely be establishing what level of forest health awareness and best practice currently exists; where the gaps are and how best to bring people on the journey as *Forest Shield* evolves. Because even the most well-designed system will fall short if it is not understood, supported and actively engaged with by those it depends on.

Getting these foundations right will require time, scrutiny and importantly, a willingness to ask hard questions about what is working and where there is room to improve and strengthen our approach. This is not about criticising existing frameworks or approaches. Rather, it is about identifying how, as a sector, we can better protect our assets, values, jobs and supply chains by future proofing our approach to forest health through biosecurity risk management.

Across the sector, information is being gathered, perspectives are being tested and assumptions are being challenged. The review is examining how the system is governed, how it is funded and how well it supports the full spectrum of biosecurity activity – from prevention and surveillance through to diagnostics and response. It is also considering how participation across the sector can be strengthened, recognising that biosecurity is not the responsibility of any one group, but a shared effort. Everyone in the forestry sector has a role to play in protecting our forests.

This kind of work can be difficult to see from the outside. It does not produce immediate, tangible outputs. But it is the stage at which the most important decisions are informed and shaped.

The programme remains on track to deliver a business case by the end of June 2026. This will draw on the findings of the current review to set out a coordinated, industry-led pathway for strengthening forest biosecurity over the coming years. It will provide clarity on where investment is needed, what capabilities should be prioritised and how the system can evolve to meet increasing and more complex risks.

What's being built is not just a set of initiatives, but a more resilient framework that can adapt as conditions change and new threats emerge.

This is the quiet work that determines future outcomes. The kind of work that, if done well, may never be noticed at all. Because the strongest biosecurity systems are not defined by how they respond to crises, but by how effectively they prevent them.

Forest Shield has emerged to ensure New Zealand's forest sector is not caught unprepared. While progress may not yet be visible in the forest, it is very much underway. The most critical factor in strengthening this system is active participation from everyone in the sector, taking responsibility to protect what they value. This is the baseline expectation for collective forest health and from here, we can continue to build a more resilient future.

Feature

Pines with perks: Why Zealandia's birds love radiata too

↑ A kākā nesting inside one of Zealandia's pine trees. Image; Scott Langdale

Along the edge of Zealandia's predator-proof fence, a fringe of radiata pine is quietly rewriting a familiar forestry story. Managed with ecology in mind, pines are more than just timber crops – they can also be valuable wildlife real estate.

Extending over 225 hectares, the fully-fenced sanctuary is home to some of New Zealand's rarest bird species, reptiles, fish, insects and plants – alongside *pinus radiata*.

The pine trees were planted as part of a forestry trial in the 1880s. Today, they're part of Zealandia's *Pines-to-podocarps* veteranisation programme, which originally sought to transition out all exotic tree species in favour of native podocarps.

> **The goal was simple: turn otherwise risky or redundant stems into long-lived habitat for cavity-nesting birds.**

Three years into the programme and critical insights have been gained as to the value these pines bring to the valley, demonstrating how a production species can pull double duty – earning its keep today while helping to build native forest and thriving birdlife tomorrow.

Standing on a steep slope above Zealandia's predator fence, it's easy to imagine the risk these pines once posed; a wall of ageing radiata leaning towards an asset that can cost $60,000 to repair if a single tree falls the wrong way.

On one of the earliest jobs, the team removed so many pines at once that Zealandia's general manager of conservation and restoration Jo Ledington remembers warning visitors that it was going to look messy, loud and confronting for a while.

Instead of felling every tree to ground level and hauling the wood away, Zealandia's team worked with arborist David Spencer of Tend Tree Consultancy to trial a different approach: treating pines as habitat rather than waste through a process known as 'veteranisation'.

Veteranisation involves selectively cutting and sculpting trees to mimic natural storm damage, creating jagged snags and standing deadwood instead of clearing everything completely.

In some of the retained trunks, David and his team carved deep nesting cavities, effectively fast-forwarding the decay processes that normally take decades to form hollows.

↑ Veteranisation involves selectively cutting and sculpting trees, creating jagged snags and standing deadwood for nesting opportunities

↑ Kākā chicks nesting inside a veteranised tree cavity. Image; Asta Levin Anderson

Removable fronts allow monitoring, but the cavities themselves are solid wood, insulated and weather-tight, behaving far more like a natural hollow than a plywood nest box strapped to a trunk.

The goal was simple: turn otherwise risky or redundant stems into long-lived habitat for cavity-nesting birds.

The wildlife response was immediate. Kākā, reintroduced to Zealandia in 2004 after disappearing from the mainland, were the first target species and they quickly began investigating the hollowed pines, sometimes within months of the chainsaws falling silent.

If we're going to engineer homes for wildlife, we need proof, we need to know they work.

"They're such curious birds," Jo says. "The arborists would finish a cavity, pack up the ropes and the kākā would be straight in here, checking out the real estate."

Monitoring over two seasons showed that temperatures, humidity and even mite levels inside the carved cavities closely matched those of natural nests. Faeces and leaf litter slowly composted into a warm, dry base, just as they would in a naturally formed hollow.

That evidence gave the team confidence to extend the work to more temperature-sensitive species such as the hihi (stitchbird), the tīeke (saddleback) and the titipounamu (rifleman). Titipounamu have since been observed nesting in the created cavity.

"If we're going to engineer homes for wildlife, we need proof, we need to know they work," says Jo.

The takeaway for production forestry is not that every pine stand should be veteranised, but that the same principles can be applied in lighter-touch ways to support biodiversity alongside the harvest. David's work shows how pine trees that fall outside production purposes can be managed to become long-lived structures for birds and insects, rather than something to be removed.

In a commercial setting, that might mean lifting just one part of the veteranisation toolkit: deliberately keeping a small number of safe habitat trees that hold low commercial value, accepting some standing deadwood in set-aside areas, or creating rough snags where they will not interfere with operations.

It's not a new prescription for how to log, but a mindset shift. Even in a working pine forest, a few well-chosen trees can be managed for wildlife as well as wood.

Jo admits she once saw pines as "just plain bad" in a native sanctuary, but the project has convinced her that the reality is more nuanced.

↑ Radiata sits alongside many rare species inside Zealandia's fully fenced eco-sanctuary. Image; Steve Unwin

↑ Zealandia opted to treat pines as nesting habitats. Image; Harriette Kemp

"These pines played their part in Zealandia's beginnings and now, even as we transition to podocarps, they're still doing work for us – shading soil, hosting cavities, feeding insects and in turn, birds," she says.

For forest owners who often see the public frame pine trees as a problem, the deliberate decision by a high-profile ecosanctuary to keep and reshape pines in the interests of biodiversity is a notable contrast.

Managed with long-term structure, understorey regeneration and staged transition in mind, exotics can contribute to resilient forest systems, including those where native species increasingly establish.

The *Pines-to-podocarps* experience shows how native and exotic forests needn't be rivals in all contexts; rather, they can, in the right places, create more viable habitat and ecosystem resilience than either could achieve alone.

Zealandia's restoration vision stretches far beyond a human lifetime: a 500-year horizon to rebuild a valley of podocarps and broadleaves behind its 8.6-kilometre predator fence. Pine trees are part of a decades-long effort to open a four-metre safety corridor along the fence while transitioning the canopy from radiata to rimu, tōtara and other natives.

Along the fence line, only a small proportion of pines are removed in any one zone – often only ten percent at a time – followed by a three to five year pause to allow the stand to adjust to new wind loads. Neither Jo nor David expect to see the end of that transition. But both see value in the example it sets.

"If we can take a stand of risky pines on the edge of a city sanctuary and turn it into a nursery for native forest and a magnet for kākā, imagine what could be done across thousands of hectares when forestry and ecology are pulling in the same direction," Jo says.

For the more than 140,000 people who visit Zealandia each year, the message is simple; birds don't read species labels. And at Zealandia they are telling a different story about what a pine forest can be.

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140,000

people who visit Zealandia each year, **the message is simple; birds don't read species labels.**

Print boom for India, wood opportunity for New Zealand

Doing business in India. A delegation of New Zealand and Australian representatives with the New Zealand High Commission in New Delhi, India

A new trade deal between India and New Zealand has landed just as India's appetite for wood – especially for paper and packaging – is surging, turning its love of print into one of the most promising growth stories New Zealand's forest owners have seen in years.

For growers looking to expand to markets beyond China, build relationships on the ground and line up with India's demand for fibre and value-added products, the free trade agreement (FTA) is a once-in-a-generation opportunity.

NEWS

India's daily newspaper circulation climbed to roughly 29.7 million copies in the first half of 2025, up three percent in six months.

Far from collapsing, India's daily newspaper circulation climbed to roughly 29.7 million copies in the first half of 2025, up three percent in six months, as tier-two and tier-three cities, in particular, maintained a fondness for printed media as their news source. This everyday habit translates into a growing need for printing and writing paper, packaging and tissue – all ultimately anchored in wood fibre.

India is already the world's fastest-growing major economy, posting GDP growth of just over eight percent in a recent quarter, with a median age of about 28 and a wave of urbanisation still to run.

Behind those macro numbers sits a wood market that's now worth over $16 billion USD ($28 billion NZD) across logs, sawn timber and finished products. Imports of wood and wood products have been climbing from about $630 million USD to $2.3 billion USD over the past two decades as domestic supply struggles to keep up.

India New Zealand Business Council (INZBC) strategy and trade officer Sandeep Sharma says India's sawmills are working overtime to meet their wood fibre needs – hence the country importing to fulfil the growing demand.

With the FTA negotiation having now concluded, the deal is expected to be formally signed in the first half of this year, then put through each country's legal and parliamentary processes before it enters into force.

For New Zealand, the FTA changes the starting line. India has long been a top-five export market by product category for New Zealand's forestry and wood processing industry, but volumes have been modest – around $70 – $80 million NZD in 2024 – constrained by tariffs, phytosanitary requirements and distance to market.

Under the new agreement, tariffs will be immediately eliminated on over 95 percent of New Zealand's current

An Indian sawmill visit, hosted by Kandla Timber Association

Forestry Minister Hon Todd McClay addressing the delegation at the New Zealand High Commission in New Delhi

exports to India, with forestry singled out as an early winner. This shift removes existing duties on wood products ranging from 5.5 percent to 11 percent and narrows the gap with competitors like Australia.

While tariffs attract most attention, the FTA also promotes cooperation in forestry practices and research, helping address non-tariff barriers such as quality standards and phytosanitary requirements and creating a more predictable pathway for New Zealand's wood products into India.

India is both a relationship market and a transactional market.

Sandeep describes the FTA as a "balanced, comprehensive and future-looking" economic partnership that starts with raw materials but points to value-added manufacturing on Indian soil over time. This means India wants New Zealand radiata and pulp today and New Zealand expertise, capital and brands co-invested in Indian processing tomorrow.

Ernslaw One chief executive Darren Mann joined a forestry delegation through Mumbai, Kandla and Delhi last year, where these opportunities were clear. What he saw was a country already using New Zealand radiata and expecting suppliers to show up, not just ship logs.

"They take every last bit of recoverable wood in the sawmill," Darren says. "We visited timber merchants in Delhi with stacks of lumber, plywood and blockboard, everywhere, ready to go out to customers…… not long ago a US supplier turned up, showed one of them a product and they bought it. We didn't come to talk to them about radiata, so we missed out."

Sandeep says India is both a relationship market and a transactional market.

"Indian entrepreneurs only transact with people that they have relationships with – but once they trust you, everything is black and white."

To make the most of the India-NZ FTA, Sandeep's advice to New Zealand forest owners and wood processors is to:

- Have an India strategy on paper now for what success should look like in ten years, not just a vague intention to "sell more logs"
- Invest in cultural intelligence – understand how Indians negotiate and what they value
- Focus on business-to-business engagement – New Zealand firms should front up in the market, rather than rely on New Zealand Inc to carry them in.

For growers used to the gravitational pull of China, the obvious question is why a free trade deal with India would change harvest plans for winter. Darren's answer is that India offers diversification exactly when New Zealand needs it.

"There's wood that has been supplied in fairly significant volume out of South America that looks like it will be dropping off," he says. "So, there's an opportunity for New Zealand to fill some of that gap.

A mature New Zealand–India forestry relationship five to ten years from now could look quite different depending on market conditions, regulatory developments and evolving buyer preferences. However, it's hoped to achieve:

- More consistent year-round volumes into India, rather than a boom or bust cycle that destabilises prices back home
- A sales and logistics model where vessel-by-vessel negotiations sit on top of strong, trusted buyer relationships
- Significantly higher export volumes that grow beyond today's levels – not necessarily reaching the scale of China, but possibly large enough in volume and value to provide some diversification if the Chinese market softens.

India's wood import market is currently valued at around $2.5 – $3 billion USD, with forecasts suggesting it could reach $6 billion USD in the next few years. Sandeep says that New Zealand's forestry exports could see substantial growth over the next decade as a result.

"Tenfold growth is achievable and 20-fold growth is what we should definitely be aiming for," he says.

Practical steps suggested by Sandeep and Darren that owners can take in the next three years:

Get India on the map

- Work with exporters and processors to understand which ports and processors in India are already set up to handle radiata and what they need.
- Factor India into long-term harvest and supply plans as a distinct market destination.

Align product to real demand

- Recognise that India's demand is driven by a construction boom, a growing middle class buying furniture and fittings and demand from pulp and paper mills supplying print, packaging and education products.
- Explore how your estate and local processors can support not just log exports but pulp, sawn timber, blockboard feedstock and other engineered wood products that capture more value from each tonne.

Invest in relationships

- This means building trust by consistently demonstrating reliable supply of in-spec logs and processed wood products to Indian customers. Darren says his experience is that opportunities go to whoever turns up and keeps turning up.

Think like a long-term partner

- Keep an open mind about future co-investment – from Indian capital in New Zealand wood processing to New Zealand know-how in Indian plantations and mills – because India's trade strategy favours partners who build value onshore.

> **Tenfold growth is achievable and 20-fold growth is what we should definitely be aiming for.**

Feature

Growing with purpose: The vision behind Ingka's forests

↑ Ingka believes forestry is a multi-generational commitment to the land and its people. From left: Ingka Forestland acquisition manager, Simon Honour; Southern Forests forest manager, Josh Cairns; Ingka Investments operations manager, Dylan Foster and IFS Growth harvest planner, Hamish Anderson

New Zealand's forest growing sector sits at the intersection of land use, climate and community – and how it is practised, matters. For the largest franchise owner of Swedish furniture giant IKEA, Ingka Investments, forestry isn't just a carbon sink or a source of raw material. It is a multi-generational commitment to the land and its people.

Ingka's investments extend beyond trees, encompassing biodiversity, landscape resilience and local engagement; signalling an approach built for permanence rather than quick returns. It's a company that's here for the long haul.

Around most of the world, planting new forests on marginal farmland is celebrated. It's an easy story to tell; more trees mean more carbon stored, more wood products and greater habitats for wildlife.

> **Around the rest of the world, planting a new forest on farmland is seen as a massive tick – you're creating a new forest.**

In New Zealand, the narrative is tougher. Afforestation has been painted as a threat to rural communities, with carbon forestry in particular often cast as undermining our iconic rural landscape of sheep and beef farming through conversions to pine.

Ingka Forestland acquisition manager Simon Honour says the narrative around plantation forests in New Zealand is "crazy".

"Around the rest of the world, planting a new forest on farmland is seen as a massive tick – you're creating a new forest," he says. "Come to New Zealand [and] it's the complete opposite."

Ingka Investments, the investment arm of Ingka Group whose core business is IKEA retail consisting of 411 IKEA stores across 32 markets, walked straight into that public scrutiny storm in 2021 when it first began buying land here.

In the middle of that debate, Ingka spent its first year listening to neighbours, iwi and councils before scaling up. Those conversations helped challenge the assumption that Ingka was just another carbon player and forced the team to be explicit about why they were here.

Ingka Forestland country manager Kelvin Meredith says Ingka's story is not just about offsets.

"We weren't buying for carbon; it's purely a timber play," he says.

Ingka registers forests in the New Zealand Emissions Trading Scheme (ETS) to protect land value in a carbon-driven market, but it doesn't trade units or run an offsetting business. Its model is straight-forward; grow trees from seedlings to mature stands, harvest responsibly and replant.

Profits from IKEA stores are reinvested into long-term assets such as forests, renewable energy, circular recycling and real estate.

With no external shareholders and no pressure to list on the stock exchange, the expectation is for steady returns over very long horizons, not maximum profit in ten years.

"As foresters, it's a very different outlook," Kelvin says. "We're not a turn-and-burn organisation. The horizon is multi-generational – hundreds of years – which is really refreshing compared to the quarterly shareholder-driven profit cycles you often see."

This patient capital is central to how Ingka is designing its New Zealand forests to be multi-rotation, with room to try things that may only pay off for the next generation.

> **We're looking at multi-generational forests.**

"When we buy a property, we never envisage selling it," Simon adds. "We're looking at multi-generational forests, so having that ownership in perpetuity is pretty important. It means we can invest more and it means we can do set-asides because we can look at rotations to come."

New Zealand landed on Ingka's radar early as it looked to grow its international forestry portfolio.

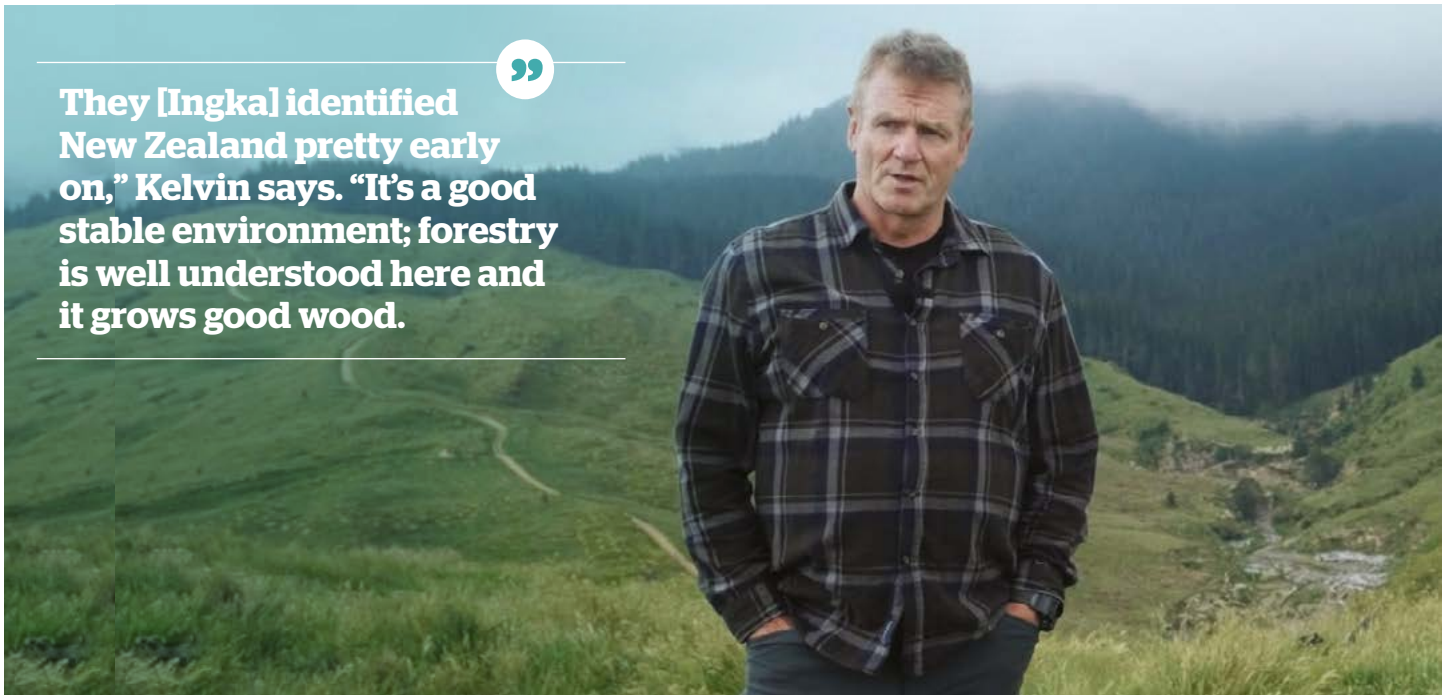
"They [Ingka] identified New Zealand pretty early on," Kelvin says. "It's a good stable environment; forestry is well understood here and it grows good wood."

Add to that New Zealand's role as a major softwood exporter into Asian processing hubs – including plants that already feed IKEA's global product stream – and the logic was compelling.

Since establishing itself in Aotearoa in 2021, Ingka has built a portfolio of around 40,000 hectares; 30,000 hectares of which are currently productive – spread from Southland and Otago through Hawke's Bay and Tairāwhiti to the Bay of Plenty and Northland.

Twenty-two percent of Ingka's forest area has been set aside and included in its Conservation Area Network. Typically, these are stands with high conservation values – a move consistent with the company's long-term stewardship strategy.

Wisp Hill in Southland is the flagship example. Formerly a sheep and beef station heavily infested with gorse and broom and generating marginal returns for its scale, it is now planted with radiata and attenuata pine on a 30-year rotation, along with some redwood on longer rotations. Roughly 2200 hectares have been reverted to native bush to create habitat corridors.



↑ NZ Forestland country manager Kelvin Meredith

Cone Forest in Southland on the other hand showcases what Ingka wants established forests to look like under its ownership. Fully mechanised harvesting, a strong safety focus, prompt replanting and large set-asides for biodiversity.

Ask Kelvin what 'good forestry' means in practice and he first talks about the forest edge, not the sawlog. Ingka's standard template is a wide riparian setback – often 20, 50 or even 100 metres, well beyond the five-metre minimum – planted in permanent native cover.

Outside that, a second band of natives is established with the potential for very selective, high-value harvesting of species like tōtara under close-to-nature regimes. Only beyond those native vegetation zones do conventional plantation stands begin.

"The main focus of the riparian strip is to protect the waterway and biodiversity values," Kelvin says. "Outside that, you can do some selective harvesting and then outside that you've got the permanent sort of harvesting regime."

For an industry used to maximising plantable hectares, it is a deliberate shift in design philosophy.

Radiata remains the primary production species, but Ingka is already investing in what it hopes will become the "future forest". Redwood as a second commercial pillar and natives such as beech, tōtara and other native species that could support longer rotations.

"Being a European company, they're very used to long rotations and continuous cover forestry," Simon says. "The numbers don't work for radiata – it's a lower-value commodity species. But when you have a higher-value species, those numbers start to work.

"With our time horizon, we've got scope to try those kinds of things and make them work in New Zealand."

Ingka is committed to its presence here not just for future generations but on a day-to-day basis. The local operation has a small core team and is supported by five independent regional management companies contracted to run operations

1) **Radiata** – Primary production species for Ingka in NZ

2) **Redwoods** – A second commercial pillar

3) **Natives** such as beech and tōtara will support longer rotations

↑ December 2025 marked the opening of Swedish furniture giant Ingka Investments' first IKEA store in New Zealand, located in Auckland

such as planting, pruning and harvesting. Those managers employ local crews and handle most local engagement.

"We put in place relationship agreements with local iwi where practical and possible," Kelvin says.

Ingka are currently working on a Memorandum of Understanding (MOU) with Ngāti Awa in the North Island, one of their neighbouring landowners, as they share a similar aspiration of restoring the whenua (land) and managing kiwi populations.

Ingka has also been supplied with seedlings from Ngāi Tahu-owned nurseries, which produces millions of seedlings each year for its own estates and for community projects around pest control and native restoration.

On the processing side, Ingka is already talking like a long-term owner.

"We prune a lot of our forests just for spread of product mix and a bit of risk mitigation," Simon says. "We talk with various wood processors on pricing agreements and will continue to do so, if not increase [that engagement]. We don't have a massive harvest profile at the moment, but that will grow over time."

While some critics have suggested that forestry development reduces local farming opportunities, Ingka says many of its sites are prime examples of how responsible forestry can add just as much value to the rural landscape. The most productive 300 hectares of farmland on the company's Wisp Hill site were subdivided off and sold to a young farmer, for instance, with the remaining land continuing to generate product, jobs and value for the years to come.

"There's no way he could have bought that whole property," Kelvin says. "But the best of the best land went back to a farmer at a smaller scale that a new young farmer could afford – a great news story in itself."

Indirectly, a lot of New Zealand timber is already flowing into IKEA products via export markets and Ingka expects that to grow through both export and over time, deeper relationships with domestic mills.

For NZ forest owners, the arrival of a foreign player with patient capital, a strong biodiversity focus and an appetite for silvicultural experimentation presents both competition and opportunity.

In a debate dominated by villains and heroes, Ingka is trying to carve out a more nuanced role; forests grown for timber, managed for biodiversity and anchored in a business model that treats New Zealand as a place to build long-term value rather than a place to mine quick carbon gains and move on.

Feature

The hidden life beneath pine: What production forest soils really tell us

↑ Ongoing research is beginning to challenge long-held assumptions about pine and soil health

Pine forests are often perceived as having a negative effect on soils, blamed for acidification, lost fertility and leaving land unusable for future generations. But research led by BSI – Scion group – environmental microbiologist Dr Steve Wakelin is putting that myth under the microscope, showing that pine's relationship to soil health is much more complex – and more positive – than commonly assumed.

At the heart of this work is a simple but often overlooked idea: soil is not an inert growing medium, but one of the most biologically rich ecosystems on Earth. Steve's research has found that well-managed radiata pine plantations sit much closer to New Zealand's natural soil conditions than many people realise and that the invisible life beneath the forest floor may be one of the country's strongest tools for sustaining productivity and climate resilience.

Pines, pH and the "poisoned soil" myth

While public debate around the effect of pines on soil has hardened in recent years, Steve's research, which includes long-term trials transitioning land between pasture and pine, finds no evidence of a permanent toxic legacy.

"If pine really poisoned soils, you wouldn't see ex-forestry blocks down here in Selwyn now running dairy cows or arable crops quite happily – but you do, everywhere you look," Steve says. "We have decades of land use change among livestock, cropping, horticulture and forestry and we simply don't see evidence of a toxic legacy of pine."

A key piece of the puzzle is soil pH. Most New Zealand soils are naturally on the acidic side and radiata pine largely holds soils close to that baseline.

↑ For the past five years, Dr Steve Wakelin has led the BSI – Scion group – Tree Root Microbiome programme

By contrast, intensive pastures and arable systems often have their pH pushed upwards with lime to suit the requirements of these crops. This alters the soil microbiology further from 'natural' NZ conditions than pine does.

"Pine does nudge pH a little, but that actually keeps most soils in a natural, acidic state – not some perceived damaged condition," Steve says. "Compared to what we do in a veggie patch or a wheat paddock, pine is pretty gentle. Whenever we talk about soil pH, natural and exotic plants, our reference point really matters. What are we comparing pine soil to and is it valid?"

Soil as the richest ecosystem on Earth

What makes these arguments compelling is the scale of life under a pine stand. Deoxyribonucleic acid (DNA) sequencing work has revealed that soils host the most species-rich ecosystem on the planet, with an estimated 59 percent of all Earth's species living in the soil.

Steve often describes forest soil biodiversity as being "as rich as a rainforest and more diverse than a coral reef", yet almost all of that occurs entirely out of sight.

This diversity underpins the core functions forest owners rely on: carbon cycling, nutrient turnover, water regulation and disease suppression.

"Soil microbes are the eye of the needle through which all organic matter must pass," Steve explains. "They regulate the whole carbon engine underneath our forests. When we manage that life well, we're not just growing trees, we're tuning the whole ecosystem."

For the past five years, Steve has led BSI – Scion group's – Tree Root Microbiome programme – an international research effort using radiata pine as a model species to understand how root-associated microbes influence tree growth, health and resilience.

As well as using New Zealand pine (*Pinus radiata*), the programme draws on samples from drought-prone regions such as Australia and southern California – environments that mirror the hotter, drier climate New Zealand forests may face later this century.

In tightly controlled trials at the Australian Plant Phenotyping Facility in Adelaide, genetically identical pines are exposed to different microbiomes and then subjected to drought. The results are striking – simply switching the microbiome

The real story is how far microbiology can take us in productivity and climate resilience if we choose to use it.

can change how well a pine survives a dry spell and how quickly it recovers when the "tap is turned off".

"We've shown that you can shift the drought-tolerance of New Zealand radiata through its microbes – that's gold," Steve says. "It's the plant equivalent of bespoke microbiome therapy in human medicine."

From elite genetics to elite microbiomes

For forest owners, the question is what this means at nursery and establishment scale. Steve's team is already working with nursery managers on how to send seedlings to the forest with an "elite microbiome" matched to their elite genetics, rather than whatever microbes happen to colonise the root plug.

Trials show that different microbiomes on the same genetic background can deliver large changes in growth rate, opening the door to microbiome-informed stock selection alongside traditional Growth and Form (GF) ratings.

"Forestry has spent decades breeding better trees and matching them to the right sites," he says. "The next step is to make sure those trees also come with the right microscopic partners, so we're not leaving easy productivity and resilience gains on the table."

Over time, Steve hopes that positioning radiata as a global model species will attract overseas research funding into New Zealand's number one commercial tree, effectively leveraging international science to solve domestic challenges.

Radiata pine productivity can be sustained rotation after rotation, without compromising soil health

Soil microbes as quiet climate champions

Beyond productivity and resilience, soil microbes are also quietly working for New Zealand's climate ledger. Certain bacteria in forest soils oxidise methane, removing a potent greenhouse gas from the atmosphere, yet that sink is not currently counted in national greenhouse gas inventories.

"Our forest soils are sitting there quietly chomping on methane, but it's invisible in the inventories," Steve says. "If we understand what those bacteria need and how to support them, we could unlock a climate benefit that's already happening under our feet."

Our forest soils are sitting there quietly chomping on methane.

For forestry the message is clear: pine soils are not the liability they are often made out to be. In many cases, they sit closer to New Zealand's natural soil baseline than intensively managed alternatives.

Long-term trials show that with proper residue management and deadwood and organic matter retention, radiata pine productivity can be sustained rotation after rotation, without compromising soil health when the 'engine' is looked after.

Steve hopes his research will help shift the conversation to how forestry can get smarter about managing these hidden living systems that make soils work.

It is this body of work that recently earned Steve national recognition, being named the 2025 *Norman H. Taylor Memorial Award* winner by the New Zealand Society of Soil Science – the society's highest honour for contributions to soil science.

"It [the award] was incredibly humbling," Steve says. "Over my career I have noted with respect the people who've won this award and finding my name on that list was a real 'come back down to earth' moment."

The award includes a national lecture series, in which Steve is speaking on the past, present and future of soil microbiology for New Zealand's productive sectors – and fittingly, shining a spotlight on the hidden half of forestry which could be used to reduce pressure on natural ecosystems.

Steve describes the recognition as validation for decades spent looking at soil through the eyes of an ecologist.

"So much of what happens in forestry goes unseen because it's below ground," he says. "Once you understand what's happening under your feet, the 'ruined soil' story just doesn't stack up. The real story is how far microbiology can take us in productivity and climate resilience if we choose to use it."

Production forests: A new frontier for kiwi conservation

↑ *Ōmataroa* project manager, Ian Tarei

Rob Schoonderwoerd, a forest manager for Matariki Forests in the Bay of Plenty, has spent more than 20 years working with iwi to run the *Ōmataroa Kiwi Project*.

He has spent much of his career with one foot in forestry and the other in kiwi conservation, observing first-hand how conservation outcomes can be achieved within working landscapes when long-term commitment and collaboration are in place.

Rob often sees forestry staff get deeply invested in understanding kiwi behaviour in their forests – and even become attached – especially when the birds are released and begin breeding.

The project covers 7777 hectares, including 7100 hectares of production forest and 640 hectares of indigenous bush, with the biodiversity-rich Puhikoko Reserve at its heart. The project aims to protect kiwi and other native species while engaging local whānau as kaitiaki, using predator control, kiwi releases and community education to support long-term population growth.

Sometimes Rob takes groups of people out to Ōmataroa to see kiwi firsthand. These visits help staff connect directly with the birds and see the impact of the conservation work in action.

"Their reaction to seeing kiwi in our forests is probably one of the most rewarding things – it really drives home what we're doing," he says.

The *Ōmataroa Kiwi Project* participates in *Operation Nest Egg*, a national kiwi breeding programme in which eggs are removed from the wild and incubated at a purpose-built facility to protect chicks from invasive predators, such as stoats. Once chicks reach approximately one kilogram, they are considered big enough to defend themselves from stoats and are returned to the forest. Through early interventions and robust predator management in the area, the local kiwi population has continued to grow.

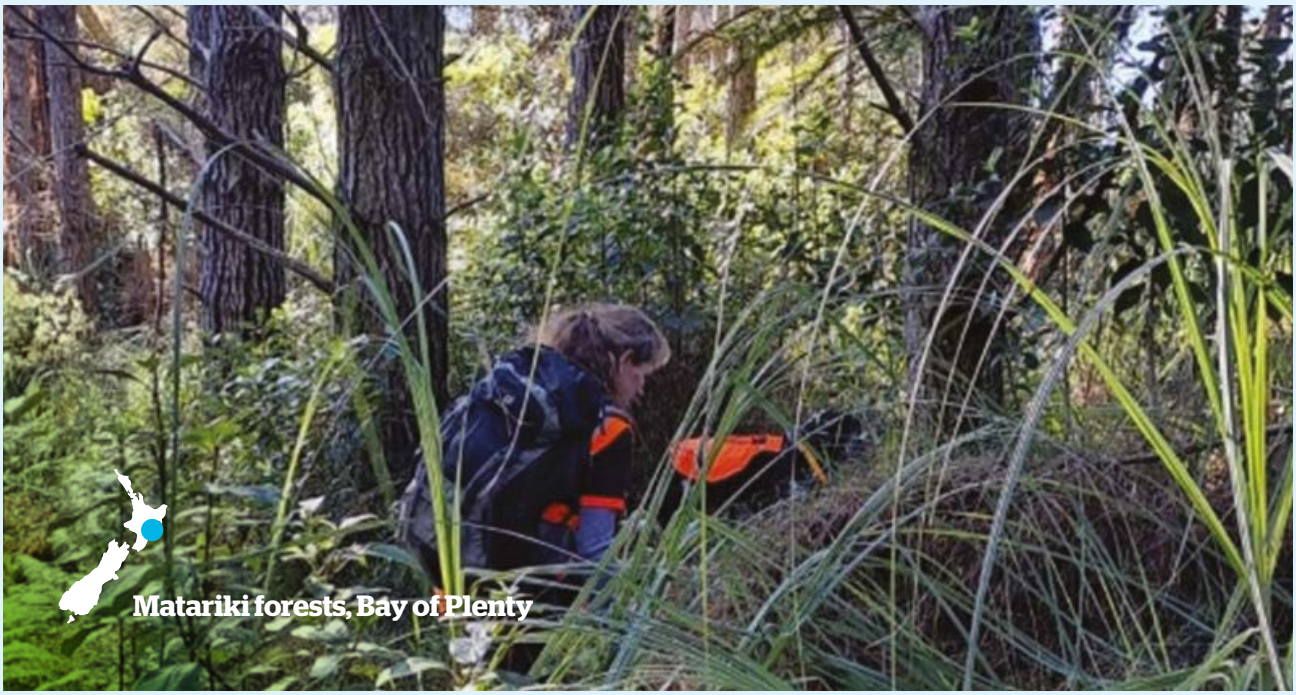
Matariki Forests, in collaboration with Save the Kiwi, is now helping to extend the project's efforts, researching how the birds use production forests, particularly during active forestry operations.

Initially, Save the Kiwi – with funding from Jobs for Nature – engaged directly with the forestry sector through a forestry specialist to bring companies onboard to support kiwi conservation and research in production forests.

The project covers

7777

hectares of forest



↑ Lesley Baigent with kiwi detection dog Yagi in Glenbervie forest

Kiwi can thrive in production forests

Kiwi are not limited to native forests alone.

Projects like *Ōmataroa Kiwi Project* are beginning to challenge the commonly held misconception, demonstrating that plantation forests are an important part of the whole landscape picture, providing high-quality habitat and foraging grounds for kiwi when effective predator management is in place. Pine needle cover creates an easy way for kiwi to find food and the soil is usually damp and soft, making it easier for kiwi to probe for invertebrates.

"I think kiwi see a production forest like a dining room," Rob says. "They come out from the native bush, they have a feed, then they drop back to the native bush."

In some cases, kiwi have not just foraged in plantation forests but have established permanent homes for themselves, with some plantation forests supporting thriving populations.

With roughly 1.8 million hectares of plantation forest in Aotearoa New Zealand, these landscapes could play a significant role in kiwi recovery.

Save the Kiwi operations manager Tineke Joustra says that while kiwi are now known to be present across numerous forestry sites throughout the North Island, there has been little targeted research into their behaviour in these environments since the 1980s.

"Since that time, forestry practices and harvesting methodologies have changed substantially, creating a critical knowledge gap," Tineke says. "What's been missing is a clear understanding of how they use these landscapes during modern forestry operations.

"Partnerships with organisations such as Matariki Forests are critical to developing practical, evidence-based approaches that allow forestry operations to continue while ensuring kiwi populations can grow safely."

Rob says the collaboration is an opportunity for the forest growing sector to develop their own understanding of what these birds get up to on their estate.

"Tracking kiwi on forestry land is something I've wanted to do for probably the last ten years," he says. "They're potentially in a lot of forests where there's production forestry, but we don't necessarily have a good understanding of their behaviour during operations."

For Rob, the motivation is clear.

"It's really about how we can ensure a degree of protection for future generations.

↑ Rob Schoonderwoerd, a forest manager for Matariki Forests in Bay of Plenty, works with iwi on the *Ōmataroa Kiwi Project*

↑ Research into kiwi behaviour in production forests is contributing to the vision of bringing kiwi from *Endangered to Everywhere*. Image; A. McVinnie

"I think we have an obligation to do everything we can, while we still can, rather than waiting for when it's too late."

This year will mark a big step forward for the project.

A Wildlife Authority has been granted to complete the research and conduct preliminary kiwi surveys in production forest areas, including Ōmataroa. This includes acoustic surveys to confirm kiwi presence and density within forestry blocks, which in turn ensures there are enough kiwi present to generate meaningful research outcomes.

In the coming months, Save the Kiwi will deploy kiwi detection dog teams to locate birds and fit them with radio tracking transmitters. Each transmitter emits a unique signal, which allows monitoring teams to track individual kiwi movements before, during and after forestry operations.

Monitoring will be carried out by a combination of Save the Kiwi staff, trained contractors and local kiwi projects, such as the *Ōmataroa Kiwi Project*, ensuring consistent data collection across sites. Save the Kiwi is also collaborating with the University of Canterbury's School of Biological Sciences around the analysis of the data gathered.

This will be the first time a coordinated national research project has closely monitored kiwi movement within active commercial forestry sites.

Support for this project has continued through Forest Growers Levy Trust funding, enabling further development of practical resources such as predator control manuals and forestry management guidelines which forestry companies can use to support kiwi on the land they manage.

This research – and future research with other forestry partners – will help set standard practices to support kiwi populations as they expand into commercial forests.

By understanding how these iconic birds use production landscapes, the project supports Save the Kiwi's vision of taking kiwi from endangered to everywhere.

I think kiwi see a production forest like **a dining room.**

Feature

Seeing the forest in full: How a decade of AI has changed forest management

New Zealand has gone from almost no operational drone use to being one of the leading countries applying remote sensing and AI-style analytics across large forest areas. Image; BSI – Scion group

The next frontier in forestry is no longer on the ground. It is hovering a few hundred metres above it, stitching together millions of data points into a living, shifting picture of New Zealand's forests.

Ten years ago, inventory meant pacing out plots with tapes and callipers. Today, with the evolution of Artificial Intelligence (AI) and remote sensing tools, foresters can sit in an office and see an entire estate, tree by tree, on a screen – and plan harvests, roads and safety around that view.

"What used to take a crew two weeks on foot now takes a couple of drone flights and a day in the office," says Forest360 Geographic Information System (GIS) analyst Frazer French. "No one has to fight the blackberry to get there."

Forestry has always relied on intense measurement, diameter tapes around individual stems, small plots scattered through steep, gorse-choked terrain and a lot of legwork to deduce what's happening across whole stands.

> **That same data now underpins national productivity and carbon models for multiple commercial species.**

Remote sensing has shifted that paradigm.

Forest Growers Research Precision Silviculture Partnership (PSP) programme manager Claire Stewart described a change from sampling to "wall-to-wall" coverage, where managers can see every hectare instead of extrapolating from a handful of plots.

Drones (Unmanned Aerial Vehicles (UAVs)), LiDAR and high-resolution imagery mean many measurements can now be taken from the air, often without sending a single person into the stand.

BSI – Scion group – principal researcher Dr Michael Watt notes that in little more than a decade, New Zealand has gone from almost no operational UAV use to being "up there internationally" in applying remote sensing and AI-style analytics across large forest areas.

LiDAR point densities have jumped from coarse landscape-scale data to resolutions fine enough to pick out individual crowns and estimate height, diameter and volume. The result is inventory-grade data across entire forests, not just sample areas.

That same data now underpins national productivity and carbon models for multiple commercial species, strengthening the business case for planted forests.

On the ground, the technology is fundamentally changing how inventory is done – and who needs to leave the office to do it.

UAV-LiDAR and image-based point clouds now deliver stand- and tree-level metrics with accuracy comparable to traditional ground plots, but at far greater scale and lower marginal cost per hectare.

Claire says remote sensing allows nurseries and forest managers to track seedling health, survival and growth remotely, rather than

Image; SPS Automation

walking massive bare-root nurseries or rugged back-country blocks – and to carry that digital record forward into the forest.

In operations, drones have become a routine tool for ortho-photo generation, area measurement and compliance checks.

Frazer's team uses Skylab, a machine-learning service that scans drone imagery for slash outside specification. It automatically calculates volumes so the team can demonstrate compliance to councils far faster than a ground-based audit.

"You could do it manually, but it would take you ages," Frazer says. "The computer can look at the whole cutover in one hit."

At a national level, BSI's – Scion group – *Forest Insights* system uses deep learning to map radiata stands and their boundaries with around 97 percent accuracy.

"For the first time we know, definitively, how much radiata pine there is in New Zealand and where it is," says Michael. "That changes everything – from wood-flow planning to where you'd put a sawmill."

Further down the precision path, Forest Growers Research is trialling Nordic Forestry Automation's cab-mounted LiDAR sensor on thinning machines. Operators can see live stocking and know exactly which trees have been removed and from where.

"Instead of guessing if you've hit your thinning target, the machine can tell you in real time," Claire says. "It's a glimpse of that digital-twin future where we always know what the forest is doing."

For harvest planners, the biggest shift has come from LiDAR-derived mapping and terrain models, which allow for accurate verification of slopes and features while assisting with risk assessment before anyone sets foot in a block.

Manulife Forest Management harvest planner Andrew Waites has watched the job evolve from pencil-on-paper maps to LiDAR as the planning "bread-and-butter", replacing many traditional contour maps and aerial photography.

He relies on LiDAR-driven software like Softree's RoadEng computer application to calculate and verify road and landing designs, harvesting hauler extraction profiles and generate AI-assisted new-road options between two points.

The health and safety gains are immediate.

"With LiDAR there are no secrets," Andrew says. "We can see all the existing road infrastructure, ground slope-types and features – including potentially hazardous areas such as bluffs – and accurately transfer these onto operational harvest plans.

"Drones are used to inspect difficult-to-access areas – like measuring wind damage – and to support engineering operations for re-mapping surface elevations of new skids. They're also used to measure quarry metal stockpiles and for photographing infrastructure for council compliance."

Frazer describes using drones to inspect ravines, slips or failed roads instead of sending people to the edge.

"What's the point in walking three hours up a hill just to go, 'oh yeah, that's there'?"

For crews who would otherwise be wading through slash and blackberry on steep ground, being able to stand at a landing and fly a drone is both safer and frankly, more enjoyable.

↑ Drones, LiDAR and high-resolution imagery mean many measurements can now be taken from the air. Image; BSI – Scion group

Despite the hype, nobody is pretending AI can write a complete harvest plan on its own. Frazer says that a model might sketch something which is "90 percent right" – but miss a crucial constraint.

Andrew makes a similar point about AI-assisted road-design. The tools are powerful for testing options quickly but still rely on experienced planners to judge what is practical, legal and acceptable on the ground.

Where AI is already proving its value is in seeing at scale: counting seedlings for survival surveys, mapping gaps, detecting disease or storm damage and flagging slash or residue where it should not be.

Forest Growers Research's PSP programme is pushing towards more individual-tree decisions, from nursery grading through to precision-release spraying, using computer vision to target interventions tree by tree rather than blanket-treating whole blocks.

The payoff is efficiency. Targeting individual trees reduces wasted spray and fertiliser, focuses effort where it will have the greatest response and extracts more value for every dollar spent.

Looking ahead, Claire imagines companies progressively building digital twins of their forests, meshing satellite, drone, ground machine and weather data into near-real-time views of risk and performance.

After a decade of innovation, UAVs, LiDAR and AI-driven analytics are no longer experimental gadgets. They are becoming part of what good forestry looks like in New Zealand.

They are cutting the time and cost of inventory, exposing hidden variation within stands and giving owners greater confidence in yield, carbon and wood-flow forecasts. Just as importantly, they are pulling people out of the roughest ground, making it easier to spot hazards and manage risk.

For owners managing significant area, the message is clear: if you are still relying solely on plots, paper maps and tired boots, you are leaving money – and safety margins – on the table.

As Frazer puts it, drones and AI are not about replacing foresters, they are about "replacing some of the walking" so foresters can spend more time making better decisions.

UAVs, LiDAR and AI-driven analytics are no longer experimental gadgets. They are becoming part of what good forestry looks like.

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