Forest Biosecurity Committee
Biosecurity Strategy to 2030

Photo credit Rayonier Matariki Forests

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NEW ZEALAND FARM FORESTRY ASSOCIATION

FOREST OWNERS ASSOCIATION

FBC Forest Biosecurity Strategy to 2030

Foreword

Biosecurity is a core component of the forest growing sector.

It protects long-term forest health, resilience and sustainability across the country and includes pre-border and post-border initiatives and international trade. Our sector has a long and proactive history of biosecurity, with significant strengths in relation to biosecurity surveillance and research.

As a long-standing crop our forests are vulnerable to pests and pathogens, and climate change has the potential to exacerbate these. Forest managers are acutely aware that these issues, and the risks of a serious incursion, need to be carefully managed.

This Biosecurity Strategy provides a unified direction for the forest growing sector, clarifies the drivers and priorities for action and enables coordination and alignment with other members in the industry.

This document also provides the basis for developing and managing Forest Biosecurity Committee (FBC) work programmes.

The strategy has been developed following a strategic review by Andrew Harrison along with workshops and consultation with committee members and stakeholders. It also incorporates aspects of the operational biosecurity review by Dr Karyn Froud.

This is a live document, one that will be regularly referred to, and one that will help to ensure that the Forest Biosecurity Committee successfully oversees and coordinates biosecurity research, surveillance, readiness and response that will serve the industry into the future.

Dr Paul R Adams,
Chair, FOA Forest Biosecurity Committee

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Definition of Biosecurity

Photo credit Rayonier Matariki Forests

Vision

A resilient and thriving forest industry protected from biosecurity threats

Mission

Working collectively to achieve cost-effective management of forest biosecurity issues and risks

Purpose and scope

This biosecurity strategy for our commercial plantation forest growing sector (large and small scale):

01

Sets a unified direction for the industry and guides planning and priority setting to 2030.

02

Clarifies the drivers and priorities for other key stakeholders, such as science providers, government, industry GIA partners, and the wider forestry industry.

03

Provides a touchstone for coordinating and managing alignment across the other work programmes and committees within which the Forest Owners Association and Farm Forestry Association operate.

Principles for biosecurity management

- Proactive
- Science-based
- Outcomes-driven
- Cost-effective
- Urgency in response
- Open, transparent and accountable
- Collaborative

Strategic drivers

This strategy contributes to 'A Forestry Roadmap for Aotearoa New Zealand: 2020-2050', and its vision that 'Forestry will be New Zealand's number 1 primary industry and exemplify the best plantation forest management in the world'. For example, the strategy:

01

Is fundamental to expansion plans and the aspirations that 'tree growth and forest production efficiency will have both doubled' and that 'our license to operate will have widespread support'.

02

Contributes to many of the "focus areas" set out in the Roadmap and designed to set the forestry sector up for the future

The key strategic drivers for biosecurity (including those from the Forestry Roadmap) are as follows:

Increasing biosecurity threats

There is continual growth in the volume of goods crossing our border, and the origin of these imported goods is changing too.

At the same time, tourism numbers are soaring. Forestry pests and pathogens are spreading around the globe, including causing new serious radiata pine diseases (e.g., in Chile and Spain).

The potential for climate change to affect our crops and industry are becoming more urgent. These collectively lift the level of threat and add pressure on our biosecurity system.

High reliance on a single species

Pinus radiata accounts for 92% of forest production.

This represents a significant vulnerability. The importance of reducing risk is recognised, with opportunities including increased resilience through diversification of our planting of species and varieties, as well as a much more prominent role for genetics, including the ability to use safe gene technology to enhance existing breeding work.

A greater understanding of the microbiome (including roots and crown) and subsequent manipulation of mycorrhizal and foliar endophytes also provides opportunities to enhance resilience to pests and pathogens.

Technology opportunities

In addition to gene technology a wide range of new technologies have the potential to strengthen forest biosecurity and drive efficiencies, including robotics, automation, big data, remote sensing and next generation diagnostic tools.

Attitudinal changes

Societal expectations continue to evolve and increasingly influence how we manage our land and environment.

This challenge and the balance between protecting the forest crop and management options will continue to drive innovation and ways to effectively manage biosecurity.

Industry expansion

The forest industry is itself evolving and the increased size and site type, as well as new owners and the ETS implications will drive our approach to biosecurity.

The wider range of new forest owners and managers will drive a range of communications and biosecurity initiatives and challenge the industry to ensure biosecurity management covers the expanded industry's needs.

Capacity

Focus on biosecurity has lifted across the primary industries, through both the introduction of the Government Industry Agreement for Biosecurity Readiness and Response (GIA) and recent experience with biosecurity events (e.g., PSA, fruit flies and M. bovis events) that has driven investment and capability building. There is a need for greater capacity within forest biosecurity in the sector.

A fuller analysis of strengths, weaknesses, opportunities and threats is included in the appendix.

Outcomes/Goals of the Strategy

- Biosecurity is a high priority at the forest company board level and throughout the industry.
- Successful management of biosecurity protects forest investment and trade.
- Forest biosecurity risks are reduced across priority pathways.
- New post-border threats are detected early through an efficient combination of general and targeted surveillance.
- Government and the forestry industry are jointly ready to rapidly and effectively respond to new forest biosecurity threats.
- Forest biosecurity response is timely, cost-effective and commercially reasonable/proportionate.
- Effective partnerships are in place and provide the foundation for effective forest biosecurity.
- There is a well-targeted forest biosecurity research programme underpinned by sustainable science capability.
- Integrity and effectiveness of New Zealand's wider biosecurity system is enhanced including public support for, and social licence to undertake, forest biosecurity activities.

Photo credit Rayonier Matariki Forests

Key Result Areas

The Annual Work plan will align with these KRA's and be reviewed regularly as part of the FBC meetings.

Photo credit: Phil Taylor

- Identify and mitigate high risk pathways
  Including partnering to introduce new national nursery biosecurity standards (the Plant Producers Biosecurity Standard) and commitment through a Plant Buyers' Accord and addressing market access risks associated with pathogens on logs.
- Industry awareness and practice
  Improved communication and biosecurity awareness across the wider forest industry, a structured and targeted forest health training programme and strengthened forest operational hygiene practices. This includes awareness of emerging pests.
- Early detection
  Early detection of new forest pests, including improvements to surveillance, new and more effective detection tools and strengthened diagnostic capability.
- Ready to respond
  Improve readiness to respond to forest biosecurity threats, including strengthening role clarity, developing response plans/operational specifications and improving access to knowledge and tools (including proactive registration and streamlining regulatory approvals).
- Licence to operate
  Including proactive engagement plans with the public to improve awareness and strengthen support and social licence.
- Science and research
  Including influencing and advising to ensure a forest biosecurity research plan and work programme that are well aligned and targeted, improving science adoption and proactive risk assessment for forest biosecurity threats.
- Collaboration and relationships
  Including with GIA partners towards better biosecurity outcomes for New Zealand, and international and cross-sector information sharing and initiatives that benefit forest biosecurity.

Key Performance Indicators

(How we will measure progress)

- Response plans and operational specifications in place for high-risk forestry pests and pathogens
- Industry proactively implementing forest biosecurity hygiene practices
- Increasing public understanding of forest biosecurity activities through active promotion by FBC and other stakeholders.
- Successful delivery of the FBC annual work programme and the Forest Biosecurity Surveillance programme
- Active participation by industry personnel in training activities (e.g. GIA response; awareness training)

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Appendix – SWOT Analysis

Strengths

Governance / Oversight

- A functional committee (FBC) that provides forest biosecurity oversight
- Membership of GIA with operational agreement in place

Collaboration / Communications

- Strengthened engagement/cohesion across the big forestry companies
- Collaboration with industry, MPI and science, NZFFA, FOA, plant sector and international experts.
- PineNet communications

Capability

- Depth of biosecurity expertise with some of this concentrated in key individuals
- Company as well as FOA expertise
- Improved Forest Biosecurity Surveillance programme
- Reliable and technically competent surveillance service providers
- Strengths in R&D, including Scion engagement in FBC/FRC, and strength in particular in relation to Phytophthora and fungi
- Forest nurseries have improved biosecurity capability.

Weaknesses

Lack of engagement on biosecurity

- Industry-wide biosecurity awareness and practices are not at the level FBC desires
- Increasing number of new operators, with many new entrants not aligned with any industry body
- Greater reactive focus on more immediate issues cf. proactive and strategic (e.g., preparedness /readiness)

Monoculture dependence

- Industry reliance on a single species and associated vulnerability/importance of spreading risk. Other commercial species also have risks.
- Need for contingency planning to be broadened from radiata dependent options to include alternative species

Capacity and timeliness

- Inadequate notification and transparency during the biosecurity investigation stage
- Limited availability of forest diagnostic expertise
- Under-developed industry readiness/response and forest health capability
- Over-reliance on key individuals (Biosecurity Manager, MPI and industry)
- Regulatory constraints on some biosecurity practice

Opportunities

Political engagement and focus

- Political will is currently favourable toward forestry, including One Billion Trees policy
- MPI training courses extended through GIA
- Biosecurity 2025 and broader policy movement to create a team of 4.7 million and address social license issues
- New drivers and values associated with forestry (e.g., ecosystem services), with opportunity to grow a greater variety of species
- Greater use of GIA funding for research and operational biosecurity in readiness and response, and regulatory change

Innovation and collaboration

- Adoption of new technologies (e.g., gene technology, robotics, automation, big data, remote sensing, next generation diagnostic tools)
- Māori as a growing economic force and increasing ownership in forestry
- New Plant Production Biosecurity Standard for nurseries and associated Buyers' Accord
- Opportunities for new training initiatives

Threats

External threats

- Continual increase in trade and tourism and associated biosecurity risks
- New serious radiata pine diseases in Chile and Spain
- Importation of used forest machinery
- Climate change and increased risks (new threats and existing/sleeper organisms)

Internal threats

- Expansion of the industry onto new land, with new nurseries and associated risk of lower awareness of biosecurity issues.
- Multiple pathways for transmission of pests and diseases through the industry
- Pressure on government for less trade restrictions
- Movement of plants around the country from non-forestry nurseries
- Increasing cost of diagnosis and number of samples increase
- Complacency – no serious forestry pest incursions over past ten years

Social Licence to Operate

- Methyl bromide use becoming restricted
- Increasing challenges with use of response tools in populated environments.

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