The Forest Biosecurity Committee (FBC) met virtually on the 13 May 2024 for its second quarterly meeting. The following represents a summary of topics that the committee wanted to highlight from this meeting.

Protecting Aotearoa from aerial invaders in a changing climate

Toni Withers (Scion), a member of the project team for this successful five-year MBIE Endeavour funded project provided an overview of the project, its goals and research aims. This project aims to improve our understanding of the role that weather and climatic conditions can play in the introduction and spread of pests and pathogens. This well-known, but little studied and understood, risk pathway represents a significant gap that can bypass our biosecurity system. This project aims to address the gaps in our knowledge and understanding so that we can better predict, prepare for and respond to events that could result in the introduction of trans-Tasman pests and pathogens into New Zealand.

Find out more about this project and its research aims.

What Characterises a Good Biosecurity Decision?

As part of the New Zealand Biological Heritage National Science Challenge, Melanie Newfield undertook a series of projects aimed at trying to understand what made good biosecurity decisions and decision-making processes. Not unsurprisingly this proved challenging because of the myriad of different values, perspectives, interests, knowledge, levels of involvement and expectations of such decisions and the impacts, implications and outcomes that they had.

What were considered good decisions by some were considered bad decisions by others. This resulted in the focus shifting to attempting to identify those elements that were common and generally considered good practice in good decision making.

Work is currently underway to develop a desktop tool compiling these elements so that that people can use this to guide them in making better decisions. Once this tool is complete, we will look to share this more widely with the sector.

Find out more about this work and other projects in this workstream.

Forest operations and disease control – project update

Darryl Herron (Scion) provided the Committee with an update on the Logging trucks and biosecurity readiness project that Scion is undertaking. This followed on from an earlier study by Ian Hood that highlighted the risks of spreading soil pathogens through operational activities. The project aims to better understand the role logging trucks and their movements, as well as other equipment, plays in the movement of soil pathogens to aid risk management decisions in the event of a response to a new, or emerging, biosecurity threat, and informing best practice risk management practices for routine operational work.

Work is still underway, and the project runs through until 2025. The project team aims to hold a range of workshops with the industry to discuss the results with the aim of potentially developing some SOP's that could be implemented in the event of a significant incursion.

Forest Biosecurity Readiness work plan

Progress is being made on the development of a biosecurity readiness work programme under the Government Industry Agreement (GIA) arrangement. The aim is to identify and agree key areas of joint readiness work to improve our state of readiness to respond to incursions of significant pests or pathogens that threaten the plantation forestry sector. This will assist in identifying priority areas of work and align planning and resourcing between MPI and the industry to be able to deliver these.

***Lecanosticta* Literature Review**

Scion have completed a detailed literature review into brown spot needle blight (*Lecanosticta acicola*). This pathogen represents a significant threat to radiata pine and NZ's plantation forestry industry. This review represents the first step toward assisting us with developing readiness plans for high-risk threats to the sector. This review collates the current state of knowledge of this pathogen, and it impacts and management. This will form a key reference document going forward to inform future readiness work and research, and to inform any response decision making should this pathogen arrive in New Zealand.

Plant Pass

The Forest Biosecurity Committee has identified and supported Pant Pass as a key tool to improve the forestry sectors protection from pests and pathogens.

The forest nursery pathway links to every plantation forest in New Zealand and as such is a high-risk pathway for the introduction and spread of pests and pathogens across New Zealand.

Plant pass is a voluntary nursery biosecurity certification scheme that has been developed to promote and support good biosecurity practice in nurseries and associated supply chains. The scheme provides plant buyers (i.e. forest owners) with greater, and independent, assurance that the plants that they are buying are produced under best practice biosecurity conditions and that the risks of introducing pests or pathogens are being minimised.

The FBC encourages forest nurseries to join the scheme and for forest owners to start expecting nurseries to be participating in the scheme, and to start working toward certification. Find out more about Plant Pass here - https://www.plantpass.org.nz/.

Red Needle cast and Dothistroma

The Forest Biosecurity Committee considered the recent high infection levels of red needle cast (RNC) across NZ plantation forests and the impacts that this is having on productivity. This is suspected to have been related to the unusually long La Niña weather patterns seen over the last 3 years.

Work undertaken by Scion has shown that the antifungal treatments used for Dothistroma control show promise for minimising (not eliminating) the symptoms of RNC in radiata pine if applied early (before symptoms), and that infection can be detected using remote sensing techniques. However, more work is required to understand whether RNC disease expression can be predicted and to be able to forecast disease expression to enable targeting or early treatment application.

The Committee will be working with Scion and the Dothistroma Control Committee to seek to progress this work.