

Letters to the Editor

Agri-Food and Biosciences Institute,
Belfast,
Northern Ireland.

The Editor, *Irish Forestry*

Re. Plant biosecurity in New Zealand – setting the standard

Dear Sir,

I recently took a working visit to the Plant Protection section of the New Zealand research institute Scion to examine biosecurity for the pine pathogen *Fusarium circinatum* (the causal agent of pitch canker of pine). During this time I also attended the Biosecurity conference, which is co-organised by the Ministry for Primary Industries (MPI; a government department) and the Forest Owners Association (FOA). As anyone who has travelled to New Zealand can attest, biosecurity is taken very seriously, and rigorous checks of passenger baggage and footwear are routine at airport international arrivals halls.

The conference, which is in its seventeenth year, has grown to include many sectors other than forestry, with kiwi fruit, vine, horticulture and other grower's groups also represented. I was struck by the level of planning and collaboration involved in how New Zealand manages its plant biosecurity. In this letter I will outline some of the points I noted which undoubtedly contribute to maintaining the high standards of biosecurity and plant health enjoyed by the country.

1. Working in partnership

The conference was organised, planned and run in a shared fashion between the MPI and the largest forest industry group, the FOA. The conference included sessions where the MPI detailed what they have been doing to protect the industry's biosecurity, and then what they need the industry to help with. In another session the FOA presented the work they had commissioned, and then provided the MPI with what they needed to take on board. This format seemed to work very well, with the MPI and industry being on good working terms due to their history of shared responsibility and working.

The background to this shared working is enshrined in the Government Industry Agreement Deed (GIA). Under the GIA, signatories share the decision-making,

responsibilities and costs of preparing for – and responding to – biosecurity incursions. The number of signatories to the GIA has expanded rapidly since its inception, with 18 industry partners from the forestry, fruit, vegetable, and dairy and livestock sectors all signing up. A key function of the GIA is to provide a rapid and comprehensive response to plant health emergencies. Having the right people (government, scientists and other stakeholders) in the room in an emergency can lead to a quicker and more comprehensive evidence-based response, and hopefully result in pest eradication. Australia also has an Emergency Plant Pest Response Deed, while the Biosecurity plan for Britain identifies a similar need for more collaboration between government and stakeholders¹.

2. Ambitious plans

New Zealand recently published its very ambitious Biosecurity 2025 strategy², which is a partnership between the public, industry, Māori, and government. It has five strategic directions:

- A biosecurity team of 4.7 million people;
- A toolbox for tomorrow (employing the latest in scientific and technological development);
- Smart, free-flowing information (i.e. data and information technologies);
- Effective leadership and governance; and
- Tomorrow’s skills and assets (a capable and sustainable workforce and world-class infrastructure).

I particularly like the first direction and am excited by the prospect of having every person in New Zealand on the lookout for potential pests and pathogens. This should certainly increase the chances of early detection and successful eradication of any new threats. The strategy is backed up by the very effective media campaign “Ko Tātou” (English translation “This is Us”), which seeks to even further ingrain biosecurity principles into the New Zealand way of life. Indeed, the requirement for anyone suspecting a new plant-health pest in New Zealand to report it to government is enshrined in the Biosecurity act. In Ireland and Northern Ireland there are statutory requirements for persons who discover a regulated organism to bring it to the attention of the minister (i.e. via DAFM or DAERA). In New Zealand, the public understanding and awareness of biosecurity is already high, with the baseline survey for the Biosecurity 2025 report indicating that over 50% of New Zealanders have a good understanding of biosecurity and regularly take actions to prevent the spread of pests and pathogens. This is better than the situation in Northern Ireland, with just

¹ DEFRA (2014). Protecting Plant Health: A Plant Biosecurity Strategy for Great Britain.

² Available at <https://www.biosecurity.govt.nz/protection-and-response/biosecurity/biosecurity-2025/>

30% of people involved in outdoor activities engaged in good biosecurity practices (Diane Burgess, AFBI unpublished data). The Biosecurity 2025 plan aims to increase the number of people practicing biosecurity even further, to 80% of the population.

The MPI and the FOA fund forest health surveys across New Zealand. The MPI high risk site surveillance scheme is based on surveying almost 500 high risk sites (often near ports or built-up areas) where pests are often known to first invade. Eradications are more effective when implemented before a pest is allowed an opportunity to spread. There was also an impressive presentation by MPI on the annual number of responses they launch into suspect biosecurity concerns. New Zealand uses a single point of contact, a 24/7-available biosecurity hotline phone number, for reporting all biosecurity concerns. In fact, one of the audience members at the conference was “on duty” managing the biosecurity hotline mobile phone on the day of the conference and had several phone calls to respond to during the day. Of the 15,000+ calls received to the hotline in 2018, over 5,000 were related to plant health concerns. These were all examined in detail to exclude non-risks. A total of eight risks were ranked at the highest level and invoked specific official biosecurity responses in 2018. During my time in New Zealand, government and industry were in the process of responding to an outbreak of the Queensland fruit fly in Auckland. At the time of writing (June 2019), there was an awareness-raising campaign running for the brown marmorated stink bug.

We have a lot to learn from the New Zealanders with regard to our own biosecurity. As an island, forests in Ireland and Northern Ireland have a natural defence against pests and pathogens from Britain and mainland Europe. The weak link in our island forest health protection is the human aspect, with plants and plant products that are moved in trade and for personal use presenting an ever-present risk of bringing a new pest or pathogen with them. The DAERA and DAFM websites both contain useful resources to help foresters protect forests from pests. The Observatree website (www.observatree.org.uk) also contains impressive plant pest guides. However, we should make distinct efforts to ensure a much greater proportion of our population realises its own responsibility and is empowered and harnessed to protect our future plant security. This is especially timely as 2020 is the International Year of Plant Health. The aim of this initiative is to raise global awareness on how protecting plant health can help end hunger, reduce poverty, protect the environment, and boost economic development.

Sincerely,

Richard O’Hanlon