

Port support measured

Penny Payne - Ag Research and Lisa Gibbison - Kiwifruit Vine Health

The Port of Tauranga is New Zealand's largest and fastest growing port, processing a large volume of goods, from a wide range of diverse origins. This presents a key risk to the kiwifruit industry and local businesses as these goods may contain biosecurity risks.

With more than 1000 workers on the port and several different companies operating, there is dispersed social and geographic responsibility for managing these risks.

A team of industry, government and research groups have been working together, as the Port of Tauranga Biosecurity Excellence Partnership, to learn and measure what motivates the different groups of people with this responsibility and how biosecurity awareness and behaviours can be improved.

A range of surveys and interviews have been conducted with four key groups to provide a baseline measurement, to allow tracking over time, and to measure the effectiveness of the interactions the excellence partnership has with each group.

The four groups were: port staff, transitional facility staff (where biosecurity goods are held and inspected before being cleared), members of the local community, and school children.

For each group, we designed targeted surveys to measure their awareness and understanding of biosecurity and to find out if and how they would react to a biosecurity situation (for example, if they saw an unusual insect).

For the children, we also helped to develop a House of Science educational kit for classrooms. This is currently reaching hundreds of children across the North Island every week.

All in all, the research indicates that all

four groups appreciate the importance of biosecurity, and report being generally familiar with the concept (for the children, particularly after using the biosecurity education kit). All groups appear open to receiving more information or training about biosecurity and are willing to support biosecurity outcomes.

From the survey results, we have developed recommendations for targeted interventions to best improve biosecurity awareness and behaviours in each community group, the first of which will be implemented during this year's Biosecurity Week activities (starting Monday 21 October) at the port.

What we found

Port staff

Port staff were surveyed because they are a 'first line of defence' for biosecurity, for a large amount of incoming goods. They are a group who report that they understand what biosecurity is, and rate that they know how important it is, for themselves, and the wider environment. When asked however, most staff provide a relatively simple definition, and do not tend to consider the more serious ramifications of a potential incursion.

Education needs to continue with this group regarding the scope of biosecurity, current biosecurity threats, and reporting protocols. It is important for this group that reporting processes are further streamlined to ensure consistency and ease of reporting across the port.

Biosecurity Excellence at the Port of Tauranga

The goal is to have a port community committed to biosecurity excellence, where we work together to prevent and respond to biosecurity risk.

By working together, we can help protect the Bay of Plenty's environment, communities, orchards, forests and farms from unwanted biosecurity risks.

Transitional facility staff

Transitional facility (TF) staff were surveyed because they are also a key line of defence for incoming goods, which are not being unpacked at the port. TF staff tend to be informed, engaged and cognisant of biosecurity. Although most staff provided relatively comprehensive definitions of biosecurity, some definitions were contaminated (e.g. included chemical substances).

There is a need to ensure all TF staff (not just operations managers and accredited people) have some biosecurity training. Resources, such as pest alerts, need to reach all staff in all TFs.

Local community members

Local community members were surveyed because they are a second line of defence for biosecurity. Incoming pests, weeds or diseases may become established on their properties, so they need to be able

Biosecurity at and around the Port of Tauranga

Understanding, perceptions and behaviour of four key groups.

Local Community rated:

their understanding of biosecurity	7.4/10
biosecurity as a threat to the Port of Tauranga	9.6/10
their ability to make a difference for biosecurity	8.4/10

School Children rated (after biosecurity kit):

their understanding of biosecurity	5.8/10
importance of biosecurity	7.6/10
Children are better at naming biosecurity threats and pest surveillance methods after using the kit.	

Port Staff rated:

their understanding of biosecurity	8.1/10
biosecurity as a threat to the Port of Tauranga	9.4/10
their ability to make a difference for biosecurity	8.1/10

Transitional Facility Staff rated:

their understanding of biosecurity	9.6/10
biosecurity as a threat to the Port of Tauranga	9.7/10
their ability to make a difference for biosecurity	9.6/10

There is a high level of awareness and concern about biosecurity, but also a need to provide easily accessible current information.

to spot potential incursions. The local community are aware of biosecurity and concerned about the impact of a potential incursion. Most community members are enthusiastic about helping to improve biosecurity outcomes.

Areas for improvement for this group include increasing understanding of biosecurity, current threats, and appropriate processes for reporting. This aims to increase local community participation in biosecurity activities. Creating more educational resources and/or events for the community, to disseminate this information, will also be beneficial.

School children

School children were surveyed as a next

generation strategy for biosecurity. Getting children interested in biosecurity is a key strategy for producing biosecurity-aware citizens and encouraging discussions within families about what communities can do for biosecurity. It was found that children are more confident they understood what the term biosecurity means, and why it is important, after using the school kit. Despite demonstrating improved awareness and perceptions of biosecurity however, children were less likely to demonstrate improved biosecurity behaviours, after using the kit (for example looking for insects, telling someone if they saw an insect, and talking to their family about biosecurity).

The education kit should continue to be used, to increase the number and diversity

of children exposed to the concept of biosecurity. Work to incorporate and encourage simple biosecurity activities among children (e.g. talking to others to help educate them about biosecurity, keeping an eye out for pest threats, telling an adult when they find suspected pests) should also continue.

Overall, the findings from this research suggest these groups are relatively aware of biosecurity, concerned about it, and enthusiastic to learn more. Critical next steps are continuing to provide educational resources and encouraging biosecure behaviours. The plan for this research is to conduct follow-up surveys of these four groups in the coming years, to see if biosecurity awareness, perceptions and behaviours have improved. ■