FIND-A-PEST: CATCH IT, SNAP IT, REPORT IT!

Find-A-Pest came about through a desire to improve pest reporting and a shared database of pest observation information.

Biosecurity planning is most effective and efficient when we collaborate and work together.

Traditionally, organisations have collected their own data, through reports from their staff, surveys or information from grower members, with some public reports (if the public know where to report observations to).

These silos of information make it more challenging for all organisations working in biosecurity to have the information required to make informed and effective pest management plans.



Brown marmorated stink bug

AT A GLANCE

How can we support early detection of new pests and increase our understanding of the distribution and density of existing pests? Through harnessing citizen science!

RESEARCH

Following a period of consultation on the best solution and case studies, the original Find-A-Pest app was launched in 2019.

From the consultation stage, it was clear that the app needed to be easy for users, whilst collecting sufficient information for identifying and mapping the potential pest and contact details for any further follow-up that may be required.

The app also needed to be able to guide users to what pests to look out for in their region or industry, as well as giving them tools to help with identification. The app was designed to be a simple to use, one-stop-shop tool for reporting and pest education.

The system was developed to be a collaborative project – in the design and content input, the funding, promotion and identification of users' observations. A secure portal was built to allow access to user observations and data, which also enabled the direct forwarding of any potentially new-to-New Zealand species directly to Biosecurity NZ.

iNaturalist was chosen as a supporting software because it allowed access to their citizen science community of identifiers to support identification of users observations (those that were not of concern/potentially new to NZ species), as well as the technology for user management, observation management, and more lately their Al/computer learning model.

NEW ZEALAND'S BIOLOGICAL HERITAGE

Ngā Koiora

Tuku Iho



OUTCOMES/IMPACTS

Following the launch of the app, further improvements have been made over the last few years, including integration of AI technology for assistance with observation identification.

The Find-A-Pest app has been steadily increasing in users and numbers of observations. The launch of the latest update in 2023, combined with a press release and small marketing campaign resulted in a significant increase in the number of app downloads and observations received.

Around 1 - 2% of all observations received are forwarded to Biosecurity NZ.

The platform gives industry groups and councils a platform for investigating different species that are of importance to them. For example, viticulture and learning more about the spread and impact of garden weevils, or councils and tracking the location and numbers of pest bird species.



Brown marmorated stink bug



IMPLICATIONS AND POTENTIAL APPLICATIONS

Pest awareness and reporting will always require ongoing work to encourage people to participate and report. There are many opportunities for further development and improvements, including geo-fencing technology, integration with other apps, a web portal and improved reporting tools. However, these all require further funding.



FIND OUT MORE

Find out more at findapest.nz or download the app from your app store