

Auditor's Summary

Audit of Hawai'i Department of Agriculture's Plant Quarantine Branch

Report No. 17-05



PHOTO: OFFICE OF THE AUDITOR

What problems did the audit work identify?

IN REPORT NO. 17-05, *Audit of Hawai'i Department of Agriculture's Plant Quarantine Branch (PQB)*, we found that the branch lacks the data gathering and data analysis tools necessary to define and respond to threats posed by invasive species. Other biosecurity agencies, both domestic and foreign, use data-driven risk analysis to continually guide operations, but PQB is unable to collect consistent, meaningful pest interception data or disseminate up-to-date information to its inspectors. As a result, we found that PQB inspection activities vary from inspector to inspector, based on the individual's experience. The little guidance inspectors do receive from the department is outdated or infrequently updated. Other information is communicated, in the words of one PQB inspector, "caveman style"—handed down verbally from one inspector to another.



Little Fire Ant

INVASIVE SPECIES

An alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health.

— *Hawai'i Interagency Biosecurity Plan*
2017–2027

PHOTO: ELI SARNAT

Why did these problems occur?

After more than a decade of development and close to \$4.2 million in new and amended contracts, the Hawai'i Department of Agriculture (HDOA) has failed in its attempt to implement a central integrated database system that can perform its necessary core functions. The branch's current database, Invicta, does not include important taxonomic data, communicate with other PQB databases, or support e-manifesting, a screening process that allows low-risk cargo to be pre-cleared. Because of Invicta's limited capabilities, pest interception data and other information collected by inspectors are not shared throughout the branch or integrated with other data sources to provide the branch with a necessary tool to reassess the risk of entry of invasive species.

Why do these problems matter?

In today's globally interconnected world, the State of Hawai'i must be vigilant, responsive and flexible in guarding against the threat of invasive species. Given the tremendous volume of cargo arriving through Hawai'i's ports, PQB inspectors cannot examine every box of produce, every plant or even every shipping container. Instead, the branch must develop processes and incorporate technology to deploy its inspectors and direct its biosecurity efforts efficiently and effectively. However, without a reliable source of data on which it can base decision-making, HDOA cannot and does not monitor, evaluate, adjust or improve its inspection activities. As a result, PQB inspectors operate in a bubble, inspecting today as they did yesterday. Meanwhile, new and emerging invasive species risks may be going unaddressed.

PEST

As defined by Hawai'i Revised Statutes, Chapter 150A, "any animal, insect, disease agent or other organism in any stage of development that is detrimental or potentially harmful to agriculture, or horticulture, or animal or public health, or natural resources including native biota or has an adverse effect on the environment... ."

— Hawai'i Interagency
Biosecurity Plan
2017–2027



Coconut rhinoceros beetle

PHOTO: SHIZU WATANABE



Risky Business

WHEN IT COMES to biosecurity, all pests are not equal because their potential impacts are not equal. Some insects are harder to eradicate or trap than others, while others may have longer-term effects. Couple this with the fact that agricultural inspectors can only inspect a fraction of incoming cargo, agencies responsible for biosecurity must carefully pick and choose what they inspect and how they inspect it.

For instance, the USDA's Plant Protection and Quarantine program used to measure the performance of its biosecurity efforts by the number of the insects it intercepted, not the risks it mitigated. According to its Agricultural Quarantine Inspection Monitoring Handbook, "Inspection tables were filled with QIM [quarantine inspection monitoring] pests found, justifying a good job performance. The seriousness

of the threat posed by the pest was not considered. In other words, effort was based on quantity, not the quality of the risk."

Today, USDA puts quality over quantity, using risk analysis to decide what to inspect and how to inspect it. According to the program, the entry potential of the worst pests is decreased when risk is predicted, pathways are tracked, and inspection work reassigned.