Unwanted stowaways with a sting in the tale

by Peregrine Storrs-Fox, *Risk Management Director, TT Club*

The past year clearly increased the awareness of microbiological risks, setting whole nations on unprecedented regimes. While such viral concerns continue, similar challenges are being recognised concerning the potential for movement of visible pests through the intermodal supply chain globally. There are justifiable concerns that global trade has facilitated the movement of invasive plant and animal species.

Inevitably, there are numerous vectors by which this may happen, but maritime freight containers and their cargoes have increasingly come under scrutiny, not least due to their innate intermodality reaching far into hinterlands with relative ease and lack of control. Nevertheless, empirical data regarding the types and magnitude of pest risks associated with containers and their cargoes remains mostly lacking.

As is often the case, it is not the absence of know-how to address the issue. Instead, it is about promoting the understanding of how everyone involved – from procurement, through packing and transport, all the way to local warehousing and distribution – can fulfil their responsibilities.

Prevention is better than cure

Sustainability will likely be on most board agendas under the auspices of their environmental, social and governance and corporate social responsibility policies. The impact on agriculture, forestry and the broader environment from invasive pests transferred by whatever means, including cargo or containers, can be devastating, affecting livelihoods, health and well-being over a much longer time horizon even than the continuing pandemic. Costs to respond to and manage invasive species grow exponentially as the organisms take root in the new location or region; prevention is always more cost-effective.

There are, of course, multiple sources of potential pest contamination through the intermodal supply chain. The condition of the 'metal box' structure and its cleanliness are essential elements of pest movement and basic cargo-packed protection. However, there continues to be the need to focus on the condition of the goods themselves.

Container flows are complex and may involve multiple border crossings, handovers of control and transport modes. The shipping company, which often operates the container, has little direct control over or access to containers except when they are empty in depots. However, dispatch of an empty box from a depot is not part of every trip – some containers are presented for packing immediately after discharging the previous cargo.

The most likely point of pest contamination is the packing spot, which shipping companies have no control over.

Photo: Canva

Tab. 1. Seven key principles in preventing the spread of pests and invasive species

Inspect	Visually inspect containers for pests and contaminants, e.g., grain residue. Pay particular attention to the bottom rails, forklift pockets, twist-lock fittings, internal surfaces, container tops and the underside and cross members.
Clean	Vacuum, sweep or pressure wash containers before loading goods to remove contaminants and pests. Avoid scraping containers across the ground when moving.
Clean storage areas	Keep storage areas clean. Store containers away from pest habitats or resident pest populations. Store containers on fully paved/sealed storage and handling areas. Use traps and other pest control methods to keep storage areas pest-free.
Pack clean goods	Only pack containers with clean, contaminant-free goods. Store goods in a clean, enclosed area ahead of loading. Keep the container doors closed before and after loading. Use clean handling equipment when packing goods.
Keep away from lights	Do not keep containers under bright lights as they attract insects that can infest goods and the container.
Use good quality containers	Use well-maintained containers to reduce the risk of pests sheltering in the cracks of floorboards.
Avoid contaminated areas	Avoid driving through areas that can contaminate the container, e.g., wastewater, manure and other animal faeces.

The shipper exerts such supervision, either directly or via a contractual agreement with the packer. An intricate understanding of the interdependencies and mechanics of the supply chain is required to build effective, sustainable measures to mitigate the risks of the transfer of invasive pests.

The focus should be on what can be detected visually. Yet, since not every responsible actor will physically see the **potential contaminants**, this is a matter of considering the origin of the goods being sourced, the location for packing, the season and biology of pests (when eggs or seeds are most likely), the compliance of the required packaging and the prevailing conditions at the time of packing the container(s).

A buyer in the destination country needs to investigate a wide range of factors beyond the requirements of the desired product – as, of course, does the seller or producer. Similarly, forwarders and logistics operators should proactively enquire about the overall environmental conditions for packing – will a container be selected from a soil-based depot, will packing be carried out at night (attracting insects) or in the rain, and is the dunnage compliant with ISPM 15 – Regulation of Wood Packaging Material in International Trade of the International Plant Protection Convention?

What can be done?

The initial step involves developing, improving and raising awareness of applicable standards and practices to reduce potential exposure, coupled with recognising the potential impact allowing pests unfettered access to the global supply chain can have. Numerous sources of guidance are available, including the **CTU Code** and the **Joint Industry Guidelines for Cleaning of Containers**, providing a practical and proportionate approach to mitigating this particular risk. The Australian Government's Department for Agriculture is more active than many national authorities in promoting container cleanliness with guidelines (Tab. 1).

Pivotal juncture

Against this backdrop, certain national governments are lobbying for more rigorous action and proposing regulation, either nationally or internationally, to prevent the unwanted and generally inadvertent transfer of invasive plant and animal species.

TT Club, along with the other Cargo Integrity Group partners, calls for the opportunity for greater levels of industry involvement at this pivotal juncture. Awareness of the risks is a fundamental starting point in addressing this global challenge. Not only actors within the freight and logistics community are involved in the call to action but also parties across departmental boundaries within governments, recognising the interfaces of trade facilitation, border control, environmental and safety activities.

The international debate, driven by the **International Plant Protection Convention** within the **UN Food and Agriculture Organization**, centres on the degree of mandated requirements that may be appropriate to impose on the intermodal supply chain – with potential disruptive impact and significant compliance and enforcement costs throughout the industry.

Contamination by invasive species is almost always accidental or careless; all parties being aware, responsible, taking the matter seriously, and engaging actively and constructively with national/regional initiatives is urgently required to avert both the risks and burdensome regulation. ■