Safeguarding Arrangements Scheme

Biosecurity and hitchhiker pest contamination guide

Introduction

Australia remains one of the few countries in the world to remain largely free of some of most serious major pests, diseases and weeds that can affect human, animal or plant health and Australia's unique environment. Australia's isolation leaves its environment vulnerable to exotic pests and diseases.

The challenge for Australia in managing hitchhiker pests and biosecurity risk is increasing due to a rise in global trade and travel resulting in movement of pests and diseases around the world. Imported cargo presents a significant biosecurity risk as a potential pathway to transport biosecurity containments from foreign countries into Australia.

Biosecurity controls at Australia's borders prevent the risk of exotic pests and diseases from entering and establishing in Australia, they also protect Australia's agricultural industries, economy, environment and way of life. These controls include applying biosecurity treatment plans, such as cleaning, fumigation and heat treatment to targeted high risk goods.

What is biosecurity risk?

Biosecurity risk is defined as:

(a) the likelihood of a pest, disease or weed:
  (i) entering Australian territory or a part of Australian territory; or
  (ii) establishing itself or spreading in Australian territory or a part of Australian territory;

AND

(b) the potential for any of the following:
  (i) the disease or pest causing harm to human, animal or plant health;
  (ii) the disease or pest causing harm to the environment;
  (iii) the economic consequences associated with the entry, establishment or spread of the disease or pest.

Biosecurity risks to Australia

1. Plant based biosecurity risks (including seeds).
2. Animal based biosecurity risks.
3. Soil and soil related material.
4. Insects and snails.

Plant-based biosecurity risks

Plant-based biosecurity risks comprise different forms of vegetative based material including:

- Live - live plants, weeds, sprouted seeds.
- Dried - leaves, twigs, branches.
- Seeds – dormant, plant pathogens, exotic weed seed species.

Animal-based biosecurity risks

Animal-based biosecurity risks comprise a range of material from animal origin:

- Live – mammals (e.g. rats, mice), amphibians (e.g. toads, frogs), reptiles and birds.
- Dried – dead animals, animal parts, animal fluids.
- Nests or nesting material – rodents, birds, feathers and fur.
- Faeces – animals, rodents, birds.

Soil

Soil and related material pose a biosecurity risk to Australia because they have the potential to harbour other biosecurity risks such as:

- Plant material and pests – weed seeds, insects, mites, snails.
- Plant pathogens – fungi, bacteria, viruses.
- Animal material – including faeces, diseases, parts and fluids.

Insects and Snails

Insects and snails find their way onto cargo for several reasons including:

- Shade – out of the sun or other exposed environment.
- Shelter – out of adverse weather conditions.
- Food source – other organic biosecurity risks can be a food source for insects.
- Good surface – to make nests or lay eggs.

What are seasonal hitchhiker pests?

Seasonal hitchhiker pests can arrive in Australia on cargo and in containers and may be more common at different times of the year. They may be attracted to habitats modified by humans, have life stages that require sheltered areas or have dormant life stages, allowing them to survive extended periods in transit.

Many hitchhiker pests can potentially have a very strong invasive impact. The seasonal hitchhiker pest Brown marmorated stink bug (BMSB) is a significant horticultural pest not recorded in Australia. It is an invasive species which feeds on over 300 species of plants and can severely damage fruit and vegetable crops. BMSB are also a nuisance pest as they enter vehicles, homes, and factories during autumn months, looking for places to shelter over winter.

Seasonal biosecurity control measures assist in lowering the risk of BMSB arriving and establishing in Australia. These include onshore biosecurity measures such as mandatory treatments of target high risk goods, and clearance pathway schemes such as the Safeguarding Arrangements Scheme.

Safeguarding Arrangements Scheme

The Safeguarding Arrangements Scheme (the scheme) is an alternative clearance pathway for BMSB targeted goods, shipped in hard six-sided containers from risk countries during the BMSB risk season, 1 September to 30 April.

The scheme offers importers the opportunity to demonstrate that processes in their manufacturing supply chain can effectively prevent their goods from being exposed and contaminated with BMSB and other exotic pests. These approved alternative biosecurity controls remove the requirement for mandatory biosecurity controls for BMSB treatment on arrival, by ensuring the goods are free from pest contaminants prior to export to Australia.

Reducing seasonal hitchhiker pest contamination risk

Manufacturers, exporters and port operators can assist in reducing the likelihood of seasonal hitchhiker pest introduction to Australia through implementing contamination risk reduction strategies at manufacturing and storage facilities, along transport routes and at the port of loading by:

- Conducting regular checks of facilities and surrounding areas for pests.
- Regular cleaning and inspections of facilities, ports, equipment and cargo.
- Undertaking pest control methods (insecticidal fogging, vermin control – trapping, baiting).
- Removal of nearby insect nests or aggregations at facilities across the supply chain.
- Removal of vegetation.
- Using lights that reduce attraction of seasonal hitchhiker pests.
- Keeping goods and cargo indoors.
- Using tarpaulins or blankets to cover holding area/s and restrict pest movement.
- Isolating pest affected cargo and goods in an area away from other cargo to prevent cross-contamination.

- Keeping goods and containers away from vegetation, soil, pest habitats or resident pest populations to reduce contamination risk.
- Inspecting containers before use and/or during packing prior to sealing.
- Keeping containers doors closed where possible during breaks in packing.
- Keeping warehouse doors closed where possible at manufacturing and storage sites.
- Avoid positioning containers on soil, around vegetation and water.

Reducing biosecurity contamination risk

Manufacturers, exporters and port operators can assist in reducing the biosecurity risk to Australia through the introduction of biosecurity risk management strategies at manufacturing and storage facilities, along transport routes and at the port of loading by:

- Raising biosecurity awareness at processing facilities.
- Implementing effective cargo and goods cleaning processes.
- Implementing preload inspections of cargo, containers and goods prior to loading onto vessels.
- Inspecting and removing contamination from cargo, containers and goods prior to export.
- Preventing re-contamination of cleaned cargo, containers and goods.
- Storing cargo, containers and goods away from pooled water which can host insects and their larvae.
- Provision of physical barriers.
- Implementing pest and weed management strategies to ensure cross contamination of clean cargo and goods does not occur.
- Application of weed control measures (e.g. mowing, slashing).
- Removal of vegetation surrounding wharves, manufacturing, and storage facilities.
- Applying port hygiene practices.

Where to look

Check for biosecurity and seasonal hitchhiker pest contamination risks throughout the supply chain. Key areas include (but are not limited to):

- Manufacturing, storage, port facilities and surrounding areas
    - Look for nesting areas, evidence of dead insects, rodent / bird droppings,
    - Remove any vegetation that may harbour pests and risk material.

- Inside and outside surface of shipping containers
    - Look for insects and evidence of infestations (e.g. wasp nests, spider webs, egg masses).
    - Remove any soil and plant material.

- Attached to machinery, vehicles, and other exposed goods.
    - Look for areas where animals may hide- inside cabins and engine blocks, in wheel arches.
    - Check and remove risk material attached to sticky body plastics.

- In timber (e.g. pallets)
    - Look for insects and/or evidence of infestations (e.g. borer holes and frass, spider webs, egg masses).

- Remove any soil, fungal growth and plant material.

- In packaging including plastic wrapping and cardboard boxes.
- In food stuffs and wrapping.

Types of biosecurity contamination

The following table lists common biosecurity contamination risks and the possible treatments when found on cargo offshore.

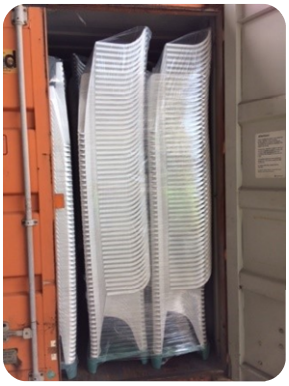
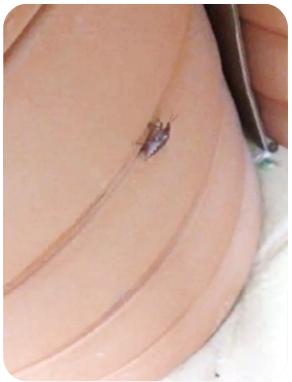
Contaminant		Possible treatment
Surface Exterior	Seed	Physical removal. E.g. dislodge, vacuum, wash and clean surfaces. Removing surfaces that seeds could adhere to. E.g. sticky body plastics, ensure no sticky coverings are loose or overhanging.
	Plant material	Physical removal. E.g. dislodge, vacuum, washdown.
	Soil	Send affected goods for a washdown. Remove with dustpan and broom.
	Insects	Remove insects and any nesting material and / or send for insecticide or fumigation treatment.
	Animal Material	Remove by washdown, disinfection, brush and broom.
Surface Interior	Seed	Physical removal e.g. dislodge with tape, vacuum, wash and clean surfaces.
	Plant material	Physical removal e.g. dislodge, vacuum, wash.
	Soil	Vacuum, disinfection, washdown.
	Insects	Remove the insects and nesting material and / or send for insecticide or fumigation treatment.

Annex A: Biosecurity risks

Brown marmorated stink bug (BMSB)

Brown marmorated stink bug (BMSB) is a significant horticultural pest not recorded in Australia which can severely damage fruit and vegetable crops.


BMSB will seek out sheltered habitats to overwinter during the colder months in BMSB countries. Types of goods associated with BMSB detections include machinery, packaging, household goods and stored cargo.
Maintaining clean supply chains and implementing mitigation measures to inspect and / or treat goods prior to export reduces the risk associated with seasonal hitchhiker pests.


Plant related biosecurity risks

Weeds spread easily by producing large quantities of seed and dispersing via wind or adhering to surfaces. The removal of vegetation and plant material at site locations helps limit the distribution, habitat and food sources for potential hitchhiker pests and biosecurity risk material.

Vegetation growing in cracks, road edges and drains are a source of shelter for hitchhiker pests and distribution pathway for seeds and plant diseases .


Vegetation growing in neglected areas such as the roofs and gutters, and sprouted grain contaminants are indicators of moisture issues, and are ideal habitats for insect infestations, fungus and bacteria growth.



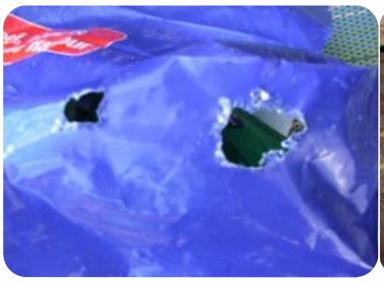
It is important to ensure vegetation are managed onsite to prevent contamination of cargo and goods with weed, seeds and plant material. High density of vegetation and plants in cargo yards and at ports will require monitoring and pest control by site staff.



Animal related biosecurity risks

Rodents

Rats and mice are common on wharves and in warehouses. Evidence includes feeding, chew marks on timber cabling and packaging, droppings, nesting material such as plant material, feathers and/or fur.

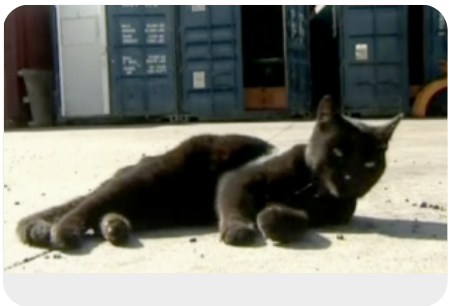

Birds

Birds can nest in cargo and containers. Evidence includes nests, eggs, feathers and droppings.



Other vertebrates

A wide variety of other vertebrates can be found at wharves and warehouses including frogs and toads, lizards, cats, dogs, foxes and rabbits. Evidence of animal contamination includes the animals, animal tracks, scats and droppings, nests, fur, skins, and signs of disturbances in goods.


Insect related biosecurity risks

Invasive insects such as ants, bees and wasps and termites can significantly impact the Australian environment and agricultural industry. They maybe vectors of plant diseases and parasites, large colonies can also become human nuisances and disrupt operations on work sites. Regular pest management and monitoring can help limit risks of cargo contamination.

Ants

Ant nests can be conspicuous or hidden, evidence of ant colonies include the presence of ant trails, ants carrying larvae, displaced soil built up into a mound- often near pavement, driveways and sidewalks.

Bees

Evidence of bee colonies include honeycombs formed on buildings and under shipping containers; and observing large numbers of bees grouped together or bee activity flying back and forth.

Wasps

Wasp nests can be mud nests with holes, or hanging inverted cones made of papery material under the roof eaves of buildings or shipping containers. They can also often be found hidden in nearby vegetation and electrical equipment or wiring; such as utility boxes.

Termites

Termites attack timber and cause damage to structures. Indicators of termites include frass mounds (grainy fecal pellets), hollowed timber, discarded wings and exit holes on the surfaces of timber. Check for mud trails under shipping containers.



Snail related biosecurity risks

Snails are proficient hitchhiker pests that are often intercepted on machinery, cargo and shipping containers. Invasive snail species such as Giant African snails can be found in and around wharves of countries where it prevails, vegetation management around wharves and container cleanliness will help minimise the distribution of snail pests.



General hygiene biosecurity risks

Rubbish bins and dunnage piles (such as packing timber for cargo transport) that have not been appropriately disposed are often a food source and shelter for biosecurity pests, and a habitat for diseases to thrive. Maintaining general hygiene on worksites will limit the biosecurity risks.

Cataloguing data

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Acknowledgement of Country

We acknowledge the Traditional Custodians of Australia and their continuing connection to land and sea, waters, environment and community. We pay our respects to the Traditional Custodians of the lands we live and work on, their culture, and their Elders past and present.