Ministry for Primary Industries
Manatū Ahu Matua

Brown Marmorated Stink Bug Risk Management – 2016/17 Season (as at 20th March 2017)

Effectively managing the risk of an invasive hitchhiker pest like BMSB requires all parties in the biosecurity system to be involved in delivering pre-border, border and post border interventions. This update is focused on pre-border and border interventions. MPI has worked across a number of stakeholders to deliver the pre-border and border actions outlined below. These actions have kept detections of live BMBS to very low levels.

Pre Border Interventions:
Interventions introduced prior to the season:-

- Mandatory pre-shipment treatment requirements on all new and used vehicles and machinery from the US is still in effect.
- In late 2015, MPI verified that three main sources of break bulk cargo requiring treatment for BMSB being shipped to New Zealand from three ports in the USA (Galveston, Baltimore and Savannah) were meeting the Import Health Standard.

Vehicles under sulfuryl fluoride fumigation in Savannah, USA

Vehicles in fumigation shed in Baltimore, US

- At the end of the 2015/16 season a senior MPI official met with the head of Italy's national plant protection organisation (NPPO) equivalent to MPI) and highlighted our concern over the BMSB outbreak in Italy and the threat posed to New Zealand through Italian exports.
- Prior to the 2016/17 season starting the Italian NPPO issued a notification to exporters highlighting the importance of container hygiene including BMSB risk and recommended proactive actions that should be taken.
- The major shipper of breakbulk cargo (Wallenius Wilhelmsen, WWL), has been voluntarily inspecting and heat treating any consignments of vehicles and machinery that have been suspected as contaminated with live stink bugs prior to loading in Europe.
- All of the WWL vessels arriving from Europe and the USA have light traps on board. One voyage trapped a range of insects including some BMSB, the mix of insects points to the United States as a source. The vessel had visited seven European ports during December 2016, two North American ports (Savannah and Baltimore) and most recently visited

Panama (Manzanillo). No BMSB were detected on cargo discharged.

Interventions introduced during the season:-

- Since September 2016 MPI has sent letters to importers and exporters of BMSB contaminated consignments notifying that BMSB was found on their consignment and recommending ways to reduce the risk of BMSB hitchhiking to New Zealand on their goods.
- New Zealand buyers of imported machinery have been asking for evidence of BMSB free machinery.
- Export production sites have been assessed via satellite imagery to gain an appreciation of the environs of vehicle suppliers to assist in targeting.
- MPI has been in regular dialogue with overseas experts to keep up to date on BMSB related events throughout Europe and the US to help inform the decision making process.
- MPI is sending two staff to Europe at the end of May 2017 to investigate areas of concern, talk to officials, researchers and exporters to improve our knowledge of the biosecurity risk and identify how exporters can best manage it prior to loading.

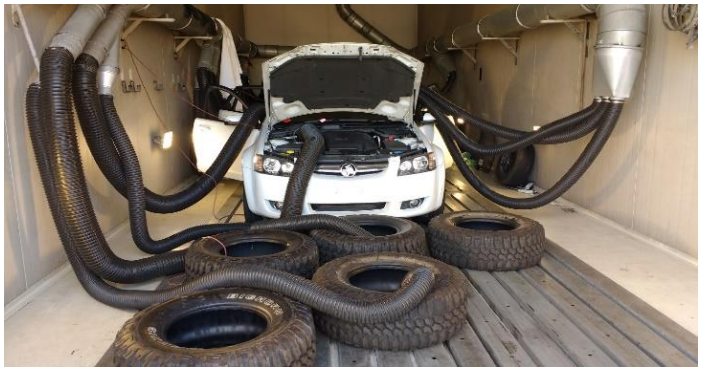
Border interventions

Interventions initiated prior to this season:-

- MPI risk analysis identified the risk period to be from mid-September to April. Currently there are increased interventions in place for specific USA states and ports, and Northern Italy for the risk season for BMSB. For Sept-Jan MPI officers have inspected 85% of Italian and 62% of US containerised consignments during this season.
- All RORO vessels carrying vehicles and machinery from the USA and Europe have all cargo holds surveyed which have both new and used USA and Italian cargo. This surveillance is addition to BAU surveillance and is specifically looking for BMSB. Some ships have light traps that are inspected and crew notify of any finds on board during the journey

Interventions initiated during the season:-

- Following inspection of new vehicles and finding no BMSB, a sample of new vehicles originating from Italy were selected to undergo a heat treatment test. This test was to further ascertain the presence of BMSB entering New Zealand on the new vehicles from Italy. No BMSB were found. **Note:** When heat treated BMSB will move out of any hidden spaces to escape to cooler air, the heat treatment chamber will kill any BMSB moving out of hiding, but this allows MPI to easily find what was in the treated item.



Heat treatment chamber at Auckland port

- Regular monitoring of interceptions to determine if a change in risk management approach was required mid-season
- MPI has closely monitored the interceptions for the season quickly identifying events of concern to MPI, such as multiple consignment interceptions or aggregations. Heightened actions are then instigated. Two alerts in the border system have been placed on two exporters this season where aggregations were found. The alerts enable MPI to target the importer / exporter and either direct treatment or inspection depending on the consignment.
- Two aggregations from China and one from Slovenia have been intercepted. This demonstrates the difficulty in targeting risk sources.
- A significant number of BMSB were found on new tractors from Italy, but all BMSB have been found dead by MPI. This may be due to mortality in transit,

or fumigation for contaminants found at the door prior to MPI interaction. As BMSB is well known for its cryptic behaviour, MPI decided the numbers intercepted was concerning and placed an alert to fumigate all consignments from this supplier.

- There has been a concerted effort towards effective communications with Transitional Facilities and accredited persons to make them more aware of the threat of BMSB, what to look out for, and what to do if one is found on their consignments. In the 2016/17 season of the 120 interceptions so far, there have been 33 (28%) interceptions called through to MPI by an Accredited Persons (AP).

Because of the multiple avenues for entry, keeping BMSB out of New Zealand is extremely challenging. The environment in which we are dealing with BMSB is constantly changing. MPI is constantly evaluating and adjusting risk management and verification actions based on information we gather from domestic and international sources. The BMSB data collected over the season coupled with our dialogues with international experts mean that we are more aware and responsive to these changes and our ability to act proactively and reactively. MPI has started reviewing this season and will consider the risk management measures (regulatory and non-regulatory) that could be implemented for the next and future seasons. It is already clear that non-regulatory interventions led by industry play an important role in management of BMSB and other hitchhiker pests.

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