Plant Health Australia

17th Australian Almond Conference
Pullman Hotel, Melbourne, November 2016

Dr Susanna Driessen
General Manager Emergency Preparedness and Response
Dr Susanna Driessen joined Plant Health Australia in May 2012 as General Manager, Emergency Response and Preparedness. This is a new position in PHA, taking on the EPPRD responsibilities previously held by Rod Turner, who retains the role of General Manager, Risk Management.

Susanna spent several years working in the floriculture, grains, cotton and plant biosecurity areas of state government departments of primary industries. She has a background in science and plant pathology, completing studies in biotechnology and an industry funded PhD in plant pathology from Murdoch University.

Susanna has a broad knowledge and experience in policy development, legislation and market access as it relates to plant health, working most recently in Plant Biosecurity, NSW Department of Primary Industries, as the Strategy Leader Plant Biosecurity Operations. In this role she was responsible for the operation of the NSW Interstate Certification Assurance scheme, as well as maintaining and developing new domestic market opportunities for NSW plants and plant products through representation on the national Subcommittee on Domestic Quarantine and Market Access.
Presentation overview

- Who is Plant Health Australia
- Australia’s biosecurity system
- Prevention and preparedness
- The “Deed”: Partnerships in emergency responses
Plant Health Australia

- Not for profit, public company, member based
- Our focus is on plant biosecurity
“To coordinate strong industry and government partnerships that minimise plant pest impacts on Australia, boosting industry productivity and profitability and enhancing market access”
Our members

Australian Government

State and Territory Governments

Industry (38)

Associate (11)
Our actions

- Work with members to **build partnerships**
- **Broker** between government and industry in the national interest
- Provide **national coordination** to improve:
  - biosecurity across Australia’s plant industries
  - capacity to respond to plant pest emergencies
- **Custodians** of the Emergency Plant Pest Response Deed
National co-ordination
Almond Industry and PHA

- Sustained and strong commitment to plant biosecurity
- Australian Nut Industry Council – original PHA member
- Almond Board of Australia
  - PHA member since September 2006
  - Signatory to the Deed since November 2006
- Prior CEO of the Almond Board of Australia a current director on the PHA Board
Australia’s Biosecurity System

A strong biosecurity system is critical
What is biosecurity?

“Biosecurity is the management of risks to the economy, environment and community, of pests and diseases, entering, emerging, establishing or spreading.”
The biosecurity continuum

### National biosecurity
Protection from risks posed by pests to industry and the environment through exclusion, eradication and control

<table>
<thead>
<tr>
<th>Pre-Border</th>
<th>Border</th>
<th>Post-Border</th>
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<tbody>
<tr>
<td>Identifying exotic pest threats</td>
<td>Implementing effective quarantine for people, machinery, plants, and goods</td>
<td>Preparing for timely detection, minimised spread and rapid response to emergency pests</td>
</tr>
<tr>
<td>Managing quarantine risks offshore, inspections</td>
<td>Establishing trapping and surveillance</td>
<td>Domestic quarantine and market access</td>
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<tr>
<td>Undertaking offshore research and development where pests are endemic</td>
<td>Inspections and treatments</td>
<td>Surveillance and Awareness</td>
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<td></td>
<td>Post entry plant quarantine</td>
<td>Farm biosecurity</td>
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<td></td>
<td>Networks for pests that may bypass checkpoints</td>
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**Australian Government**

**Achieved through effective partnerships between industry, government and the community**

*Australian Government, PHA, State governments and industry*
Challenges and drivers

- Globalisation – tourism and trade
- Financial constraints (more with less, where to invest)
- Changing landscape and primary production practices (peri-urban/urban production, northern Australia)
- Shortage of qualified professionals
- Climate change
Remoteness Index

Accessibility Remoteness Index Australia 2006
ARIA+ and ARIA++ are indices of remoteness derived from measures of road distance between populated localities and service centres. These road distance measures are then used to generate a remoteness score for any location in Australia.

ARIA+ (2006) 1 km grid
- Major cities (0–0.20)
- Inner regional (≥ 0.20–2.40)
- Outer regional (≥ 2.40–5.92)
- Remote (≥ 5.92–10.53)
- Very remote (≥ 10.53–15.00)

Data Sources:
GISCA, The University of Adelaide
Australian Government Geoscience Australia, & Australian Bureau of Statistics

Improving national biosecurity outcomes through partnerships
Prevention and preparedness
Risk management by industry and government
Return on investment
Zero risk?

- Australia’s Appropriate Level of Protection (ALOP) is **very low but not zero**

- Risk mitigation and management strategies needed at all levels
  - Nationally, regionally and individual premises levels
  - Recognition of risk along the supply chain

- Substantial benefits from partnerships

Prunus cuttings in potato tubers
Understanding/mitigating risks

Spotted anything unusual?

Nothing will protect your crops more than a good hard look.

Almond growers are the key to protecting Australia’s crops from exotic insects and diseases that could devastate the industry.

It is important that you are aware of the risk, and if you spot anything unusual in your orchard you should always check it out and call the Exotic Plant Pest Hotline on 1800 084 881. The call is free (except from mobiles) and early detection will help protect your industry.

Visit www.planthalth.australia.com.au for further information and a list of the top priority pests.

LOOK. BE ALERT. CALL AN EXPERT.

1800 084 881
Biosecurity Plans

- Outlines risk mitigation activities in the industry.
- Documents roles and responsibilities of stakeholder groups.
- Identifies key threats to the industry.
- Risk assessment to identify high priority pest threats.
### Identifying high priority pests

<table>
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<tr>
<th>Pest</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Tropilaelaps</em> mites</td>
<td>Pest of honey bees and pollination of almonds and macadamias</td>
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<tr>
<td><em>Varroa destructor</em></td>
<td></td>
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<tr>
<td><em>Trogoderma granarium</em> (Khapra beetle)</td>
<td>Significant pest of grains and other dried/stored products such as nuts</td>
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<tr>
<td><em>Halyomorpha halys</em> (brown marmorated stink bug)</td>
<td>Various crops</td>
</tr>
<tr>
<td><em>Xylella fastidiosa</em> (Almond leaf scorch)</td>
<td>Various crops</td>
</tr>
</tbody>
</table>
Implementing biosecurity on farm

VISITORS

PLEASE RESPECT

FARM BIOSECURITY

Please phone or visit the office before entering.

Do not enter property without prior approval.
Keep to roadways and laneways.
Preparing to respond if needed
The “Deed”
Partnerships in emergency responses
Emergency response arrangements

EADRA (2002)

EPPRD (2005)

NEBRA (2011)

GIA (2014)

Joint decision making post border – Readiness and Response
Key points on the Deed

- Mechanism to facilitate rapid responses to Emergency Plant Pests (EPPs)
- An agreed mechanism for decision making and investment
- Partnership between industry and government
- Reimbursement to owners (Owner Reimbursement Costs) to promote reporting of suspect EPPs
- Signed by all governments and 33 Industry Parties (including the almond and 5 other nut industries)
Industry and responses

- Decision making
- Investment
- Liaison roles
- Communication
- Biosecurity risk mitigation
- Khapra beetle (*Trogoderma granarium*) in 2007
  - First co-investment in response under the Deed
  - Discovered in personal effects in Western Australia
  - High priority pest of the almond industry (plus others)
  - Threat to export trade
Fast forward a decade (almost)

- *Varroa jacobsoni* in June 2016
  - Discovered in Townsville in a shipping container stand
  - Concerning pest for honeybee and pollination reliant industries
  - Industry/industry/government partnership in preparing and responding

Preparedness  Early detection  Eradication

[Image of Plant Health Australia logo]

Improving national biosecurity outcomes through partnerships
Varroa mite
Highlights

- Found on Asian honeybees not European honeybees
- Traps and sentinel hives already in place around the port (National Bee Pest Surveillance Program)
- Precautionary approach means movement restrictions on hives are in place around Townsville
- Volunteer beekeepers on the ground doing surveillance
- Collaborative eradication effort between 14 industries and all governments.
Web sites of interest?

- planthealthaustralia.com.au
- farmbiosecurity.com.au
- biosecurityportal.org.au
- beeaware.org.au

"Ms. Jones, there are a number of big questions here to see you. They say they won't leave until they have some answers."
Thankyou