



# Welcome

#natbioforum2017

2 November 2017





Australian Government

Department of Agriculture  
and Water Resources

# Commonwealth Government Update

#natbioforum2017

Daryl Quinlivan

2 November 2017

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Australian Government  
Department of Agriculture  
and Water Resources

# National Biosecurity Committee update

#natbioforum2017

Lyn O'Connell  
2 November 2017

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Australian Government

Department of Agriculture  
and Water Resources

# Intergovernmental Agreement on Biosecurity update

#natbioforum2017

Will Zacharin

2 November 2017

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# Priorities for Australia's biosecurity system

- An independent review of the capacity of the of the National Biosecurity System and underpinning Intergovernmental Agreement
- The final report was presented to the Agriculture Ministers' Forum on 26 July 2017
- Agriculture Ministers agreed that they would agree to a consolidated national response and revised IGAB in mid-2018

# Poll everywhere

Text:

**BIOSECURITY**

To:

**0427 541 357**



Australian Government

Department of Agriculture  
and Water Resources

# NATIONAL BIOSECURITY STATEMENT



**Tom Krijnen**

2 November 2017

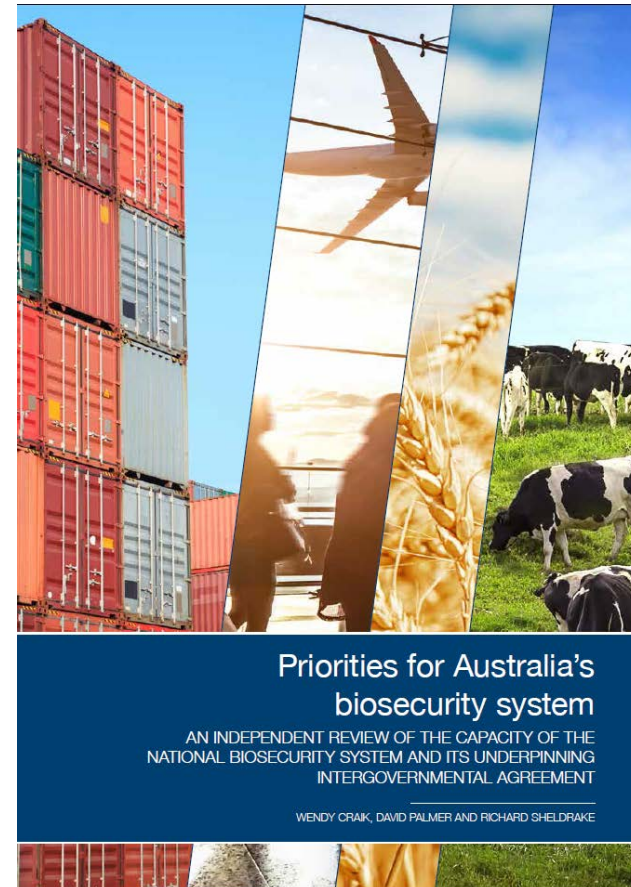
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# Priorities for Australia's Biosecurity System report

## Recommendation 2:

The NBC and the Industry and Community Biosecurity Committee should, through an open, transparent and collaborative process, lead national consultation on a draft National Biosecurity Statement, such as that proposed by this review.

The consultation process should involve all levels of government (including local government), industry and the community, with the statement finalised and launched within eighteen months of the IGAB review report.





# What is a National Biosecurity Statement?

- A single shared vision for the biosecurity system, including:
  - national biosecurity goals
  - clarity on participant roles, responsibilities and accountabilities
  - national priorities and principles for managing biosecurity.
- Drafted collaboratively with all system participants (government, industry and the community).
- Periodically redrafted, both to keep it current and to engage with new participants.

## **What do we want from this session?**

We are seeking your feedback on:

1. The process and the timeframe for developing the national biosecurity statement
2. The purpose and scope of this statement

# 1. Process for developing the national biosecurity statement

INDICATIVE TIMING	OPTION 1	OPTION 2
<b>2 November 2017</b>	<b>National Biosecurity Forum</b>	
<b>16 November 2017</b>	<b>Environmental biosecurity roundtable</b>	
<b>15 February 2018</b>	<b>National Biosecurity Committee meeting</b>	
<b>March 2018</b>	<b>Biosecurity Roundtables and other stakeholder fora</b> Consultation	<b>Biosecurity Roundtable workshop</b> Agree to a statement for public consultation Agree to a release strategy
<b>April 2018</b>		Open public consultation on draft statement
<b>May 2018</b>		
<b>June 2018</b>		NBC endorsement of strategy and release strategy
<b>July/August 2018</b>	<b>Enactment of refreshed IGAB</b>	
<b>September 2018</b>	<b>Biosecurity Roundtables and other identified stakeholder fora</b> Consultation	
<b>October 2018</b>	Open public consultation on draft statement	
<b>November 2018</b>		
<b>December 2018</b>	<b>National Biosecurity Forum</b> Stakeholder endorsement of the statement Agree release strategy	

## 2. Purpose, scope and content

### Short answer

1. In 2-3 words, please describe the benefit of a national biosecurity statement for you or your organisation?
2. Would you like to see the roles and responsibilities table as part of the statement – yes or no?

### Discussion

1. Is there any other information you would like to see in the statement?
2. Is there any information in there that you think does not belong there?
3. How would you/your organisation use a statement?



## Next steps

If you have any further questions on the national biosecurity statement, please email

[biosecurityroundtable@agriculture.gov.au](mailto:biosecurityroundtable@agriculture.gov.au)

Thanks!

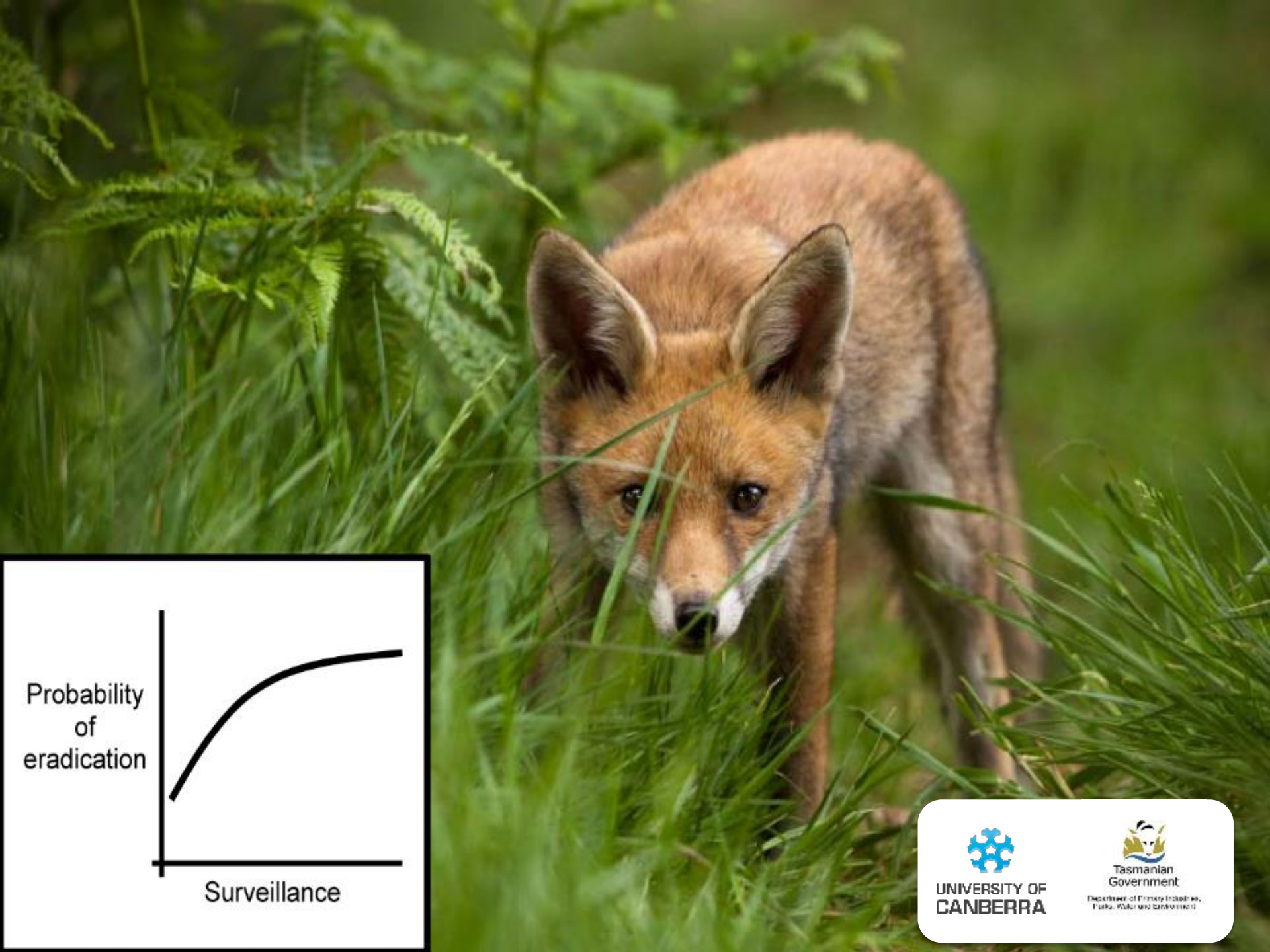
# Genetic surveillance: emerging technology opportunities

ANDREAS GLANZNIG, CEO

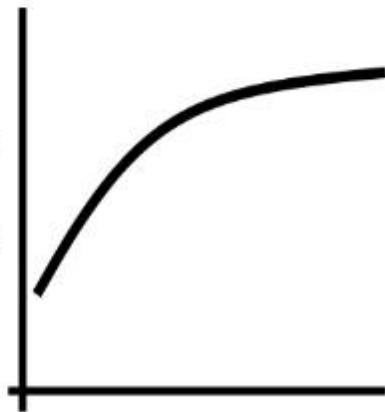
ASSOC. PROF DIANNE GLEESON, UNIVERSITY OF CANBERRA

NATIONAL BIOSECURITY FORUM 2017, CANBERRA 2 NOVEMBER 2017





Probability  
of  
eradication



Surveillance



UNIVERSITY OF  
CANBERRA



Tasmanian  
Government  
Department of Primary Industries,  
Forestry, Water and Environment









CENTRE FOR  
INVASIVE SPECIES SOLUTIONS



[biomeme@biomeme.com](mailto:biomeme@biomeme.com)





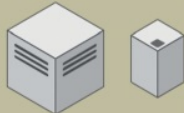
### (A) Automated sampler and sequencing

*Schematic of the key elements of an automated sampler and sequencer to be distributed across a global array of sample points*

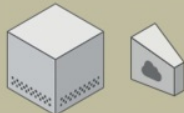
**Sample mechanism**



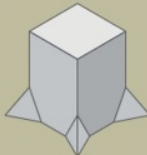
**DNA extractor and reagents pack**



**Sequencer and communication pack**

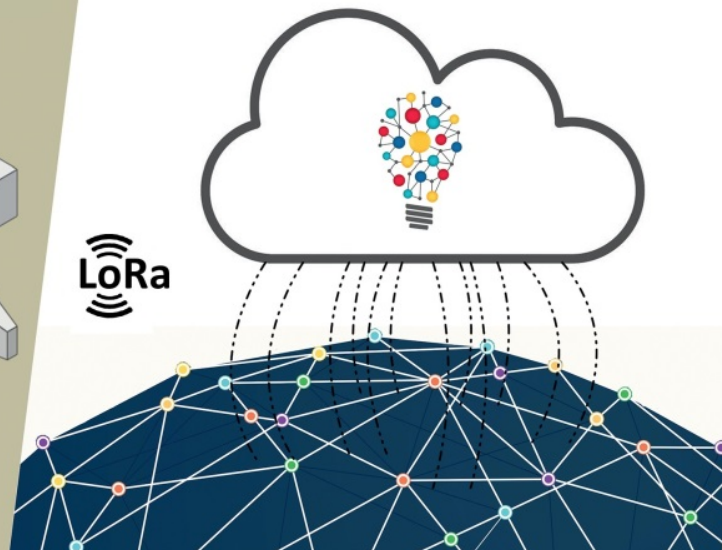


**Battery/solar pack and processor**



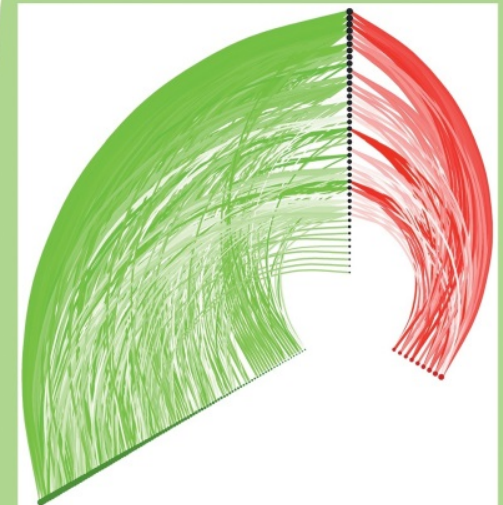
### (B) Global array of samplers and in-cloud network reconstruction

*Sequences in all uploaded samples are identified and the implicit interactions reconstructed into networks using machine learning in the cloud*



### (C) Analysis across highly-replicated networks

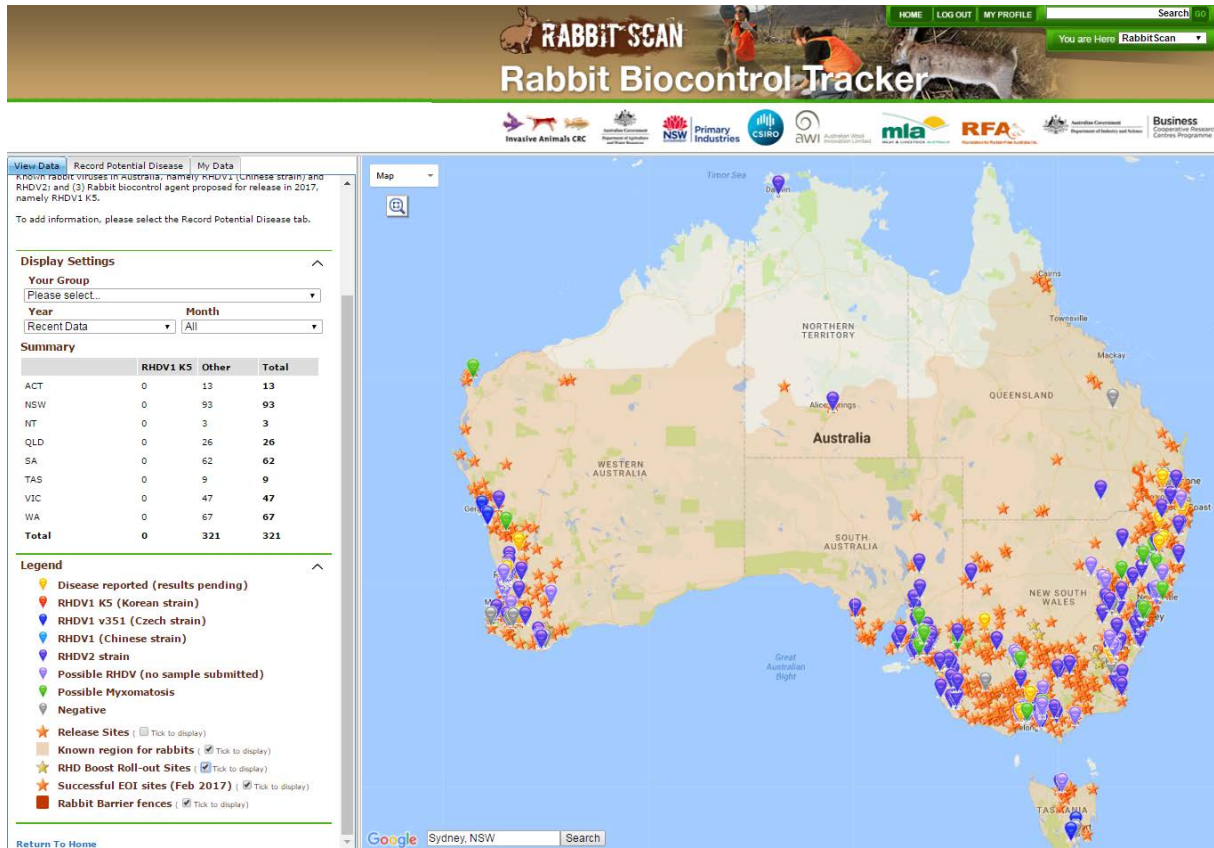
*Detection of change in network structure, from analysis of variation between networks, across the sample array*



# Integrate with community-led surveillance platform



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**Thank you.**

**Questions**







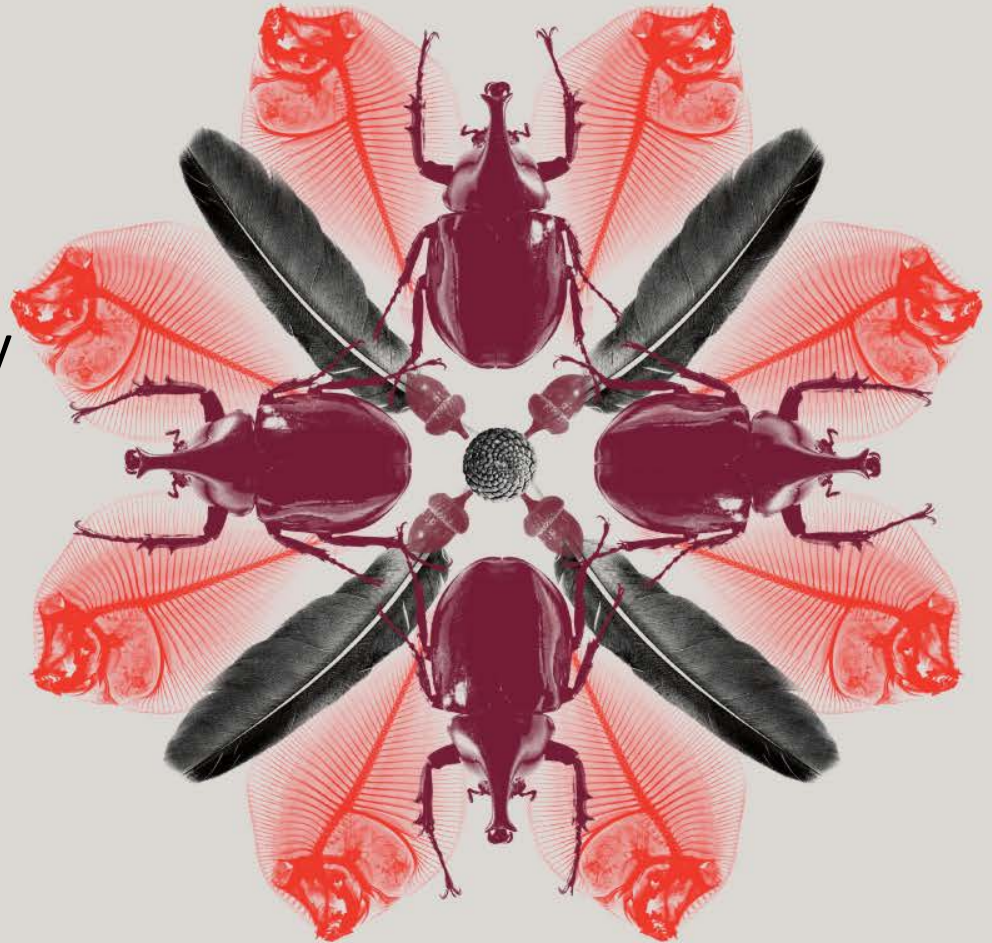
Australian Government

Department of Agriculture  
and Water Resources

## Workshop

Developing an industry  
and community advisory  
group

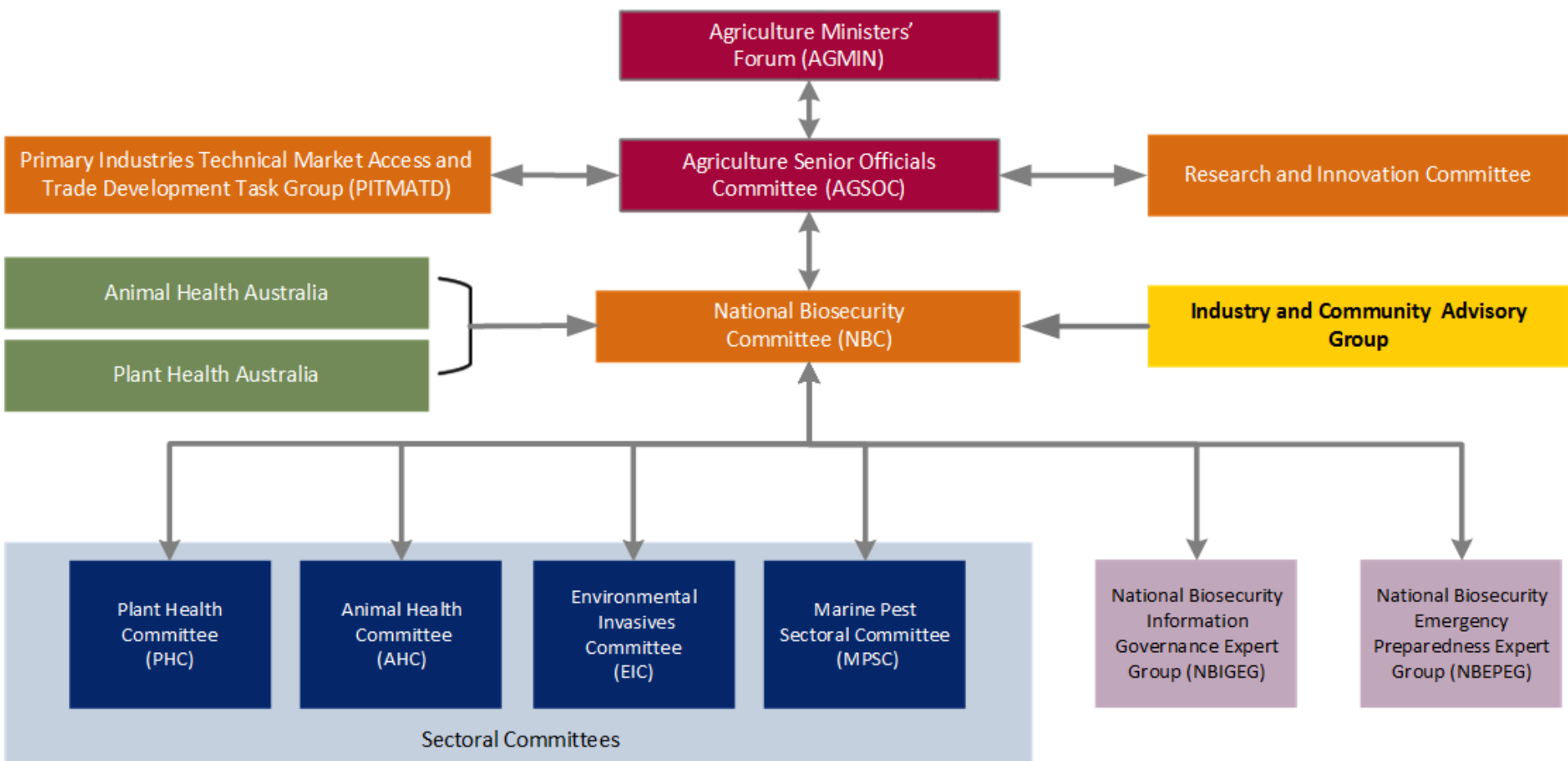
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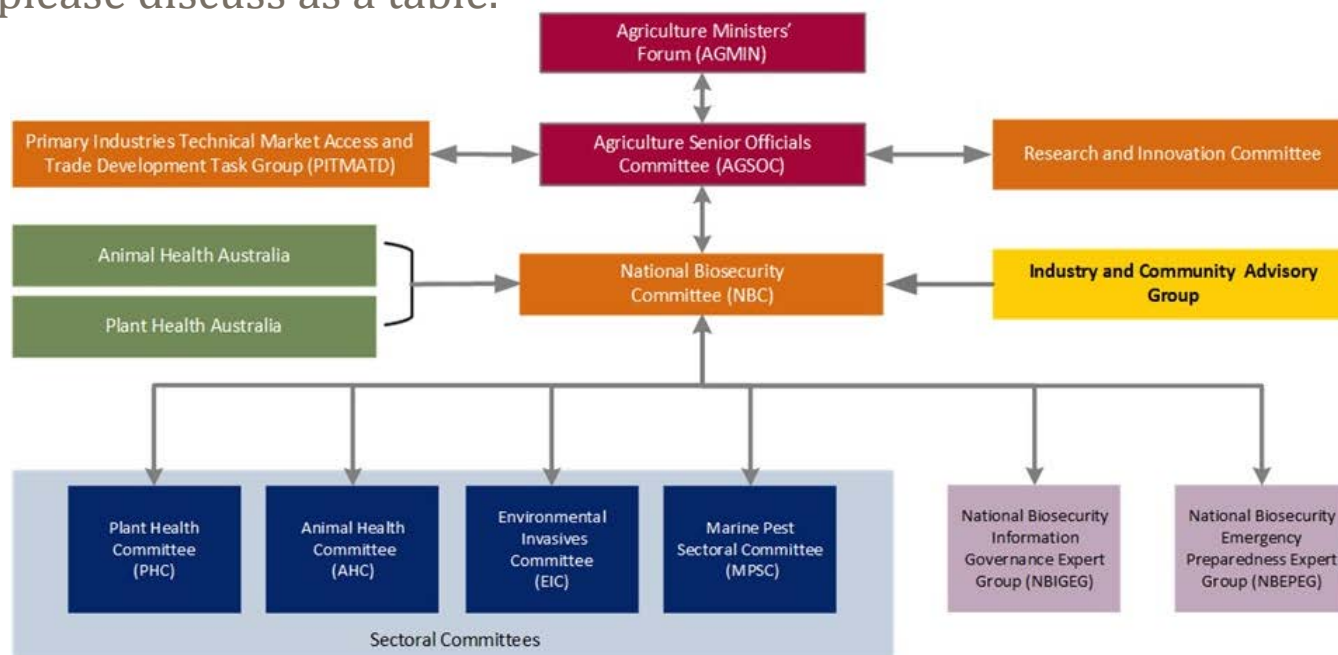
# Structure of committees



# Roles of the advisory committee

## What roles do you think the advisory group should have?

Thinking about the structure of existing committees, advisory vehicles and your knowledge of the needs in your industry and community areas – please discuss as a table.



# Poll everywhere

Text:

**BIOSECURITY**

To:

**0427 541 357**

What sort of structure would you like to see the advisory group have?

- A. Big group open to everyone
- B. Group made up of representatives from environmental, community and industry groups
- C. Depending on the topics being discussed, only representatives with an interest in the topic



# How would you prefer the Group to meet?

A. Face to face

B. Teleconference

C. Face to face and teleconference

D. Online – using ‘Have your Say’ or another online group forum

Do you want to be consulted on specific topics?

Please text no more than **three** suggestions.

If you are representing an industry body or community group, you may not be able to consult with your members prior to the Advisory Group meeting – would this affect your involvement in any of the following ways?

A. No

B. Yes - negatively

C. Depends on the issue being discussed

D. Yes – delay decisions

If there were no payment, travel allowance or fees paid to members of the Advisory Group, would this affect your involvement?

A. No

B. Yes

# Thank you

**We welcome your feedback on this session.**

Please email  
[biosecurityroundtable@agriculture.gov.au](mailto:biosecurityroundtable@agriculture.gov.au)

Or visit [agriculture.gov.au](http://agriculture.gov.au)





# Morning tea

Please return to your seats by 11:30am

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# Industry Representation

Year in Review

#natbioforum2017

**Doug Phillips** – Australian  
Banana Growers Council

2 November 2017

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# National Biosecurity Forum Bananas TR4 Experiences

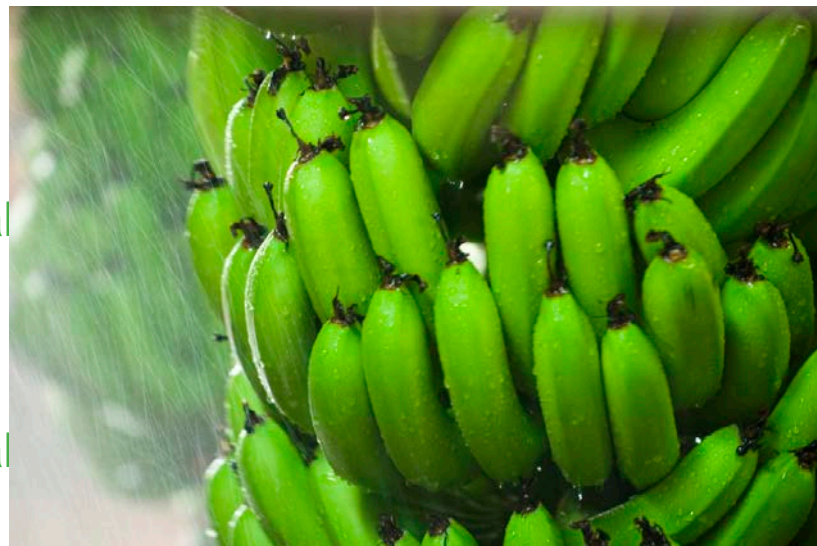
Doug Phillips  
for  
Australian Banana Growers' Council



AUSTRALIAN BANANA INDUSTRY  
CONGRESS 2015  
CHANGE. CHALLENGE. OPPORTUNITY.

## Australia's banana industry

- Australia's largest single horticulture industry
- \$600 million annual farm gate value
- Contributes more than \$1 billion annually to national economy

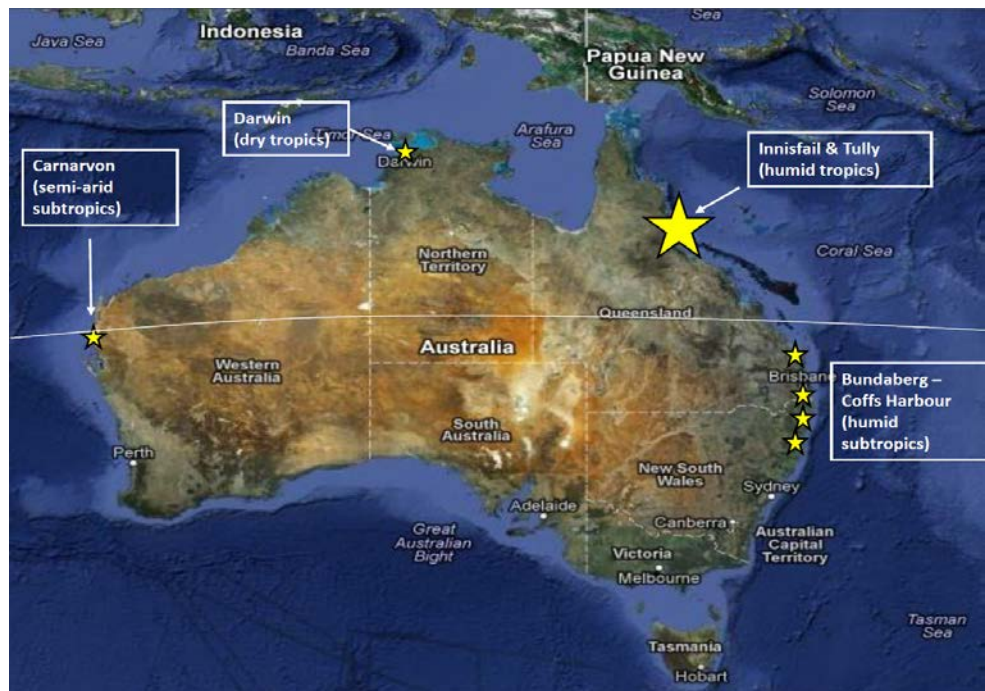


AUSTRALIAN BANANA INDUSTRY  
CONGRESS 2015  
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## Australia's banana industry

- Approx. 95% of Australian bananas grown in North Queensland



AUSTRALIAN BANANA INDUSTRY  
CONGRESS 2015  
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## Australia's banana industry

- Approx. 95% of production are the Cavendish variety
- Lady Finger next most significant variety



AUSTRALIAN BANANA INDUSTRY  
CONGRESS 2015  
CHANGE. CHALLENGE. OPPORTUNITY.

## Bananas – Panama disease TR4

- Caused by the soil-borne fungal pathogen *Fusarium oxysporum* f. sp. cubense or Foc
- Also known as Fusarium wilt of banana or Panama disease
- Regarded as the world's worst banana plant disease



## Bananas – Panama disease TR4

- Four races of Panama disease
  - Race 1 – Ladyfinger, Ducasse, Gros Michel & Sugar
  - Race 2 – Cooking bananas
  - Race 3 – Heliconia species and not bananas
  - Race 4 – Cavendish and all other commercial varieties
- Tropical vs Sub-tropical Race 4





## Bananas – Panama disease TR4

What does it do?

- Affects the vascular tissue of the plant preventing the movement of water.



## Bananas – Panama disease TR4

Panama disease is spread by:

- Plant material
- Soil
- Water



## Bananas – Panama disease TR4

Panama disease particularly difficult

- Cannot be controlled / destroyed in field
- Relatively long time between infection and expression of symptoms
- Can survive for decades even without the presence of bananas
- Taking away the host does not remove the biosecurity risk
- What are the alternative uses for land known to be infected



## Panama TR4 in Australia

- TR4 detected in the Northern Territory in 1997
- Believed to have been present for 3 – 5 years before identified
- Approx 6-8 commercial growers at time of detection
- Reduced to 1 in about 5 years





## Panama TR4 in Australia

### Timeline of key events in QLD incursion:

- 10 Feb 2015 – Tully farm owner reports odd plant to ABGC Field Officer
- 4 March 2015 - announcement of 1<sup>st</sup> suspect detection in Qld (PCR +ve), farms (1IP and 2SP) quarantined
- 9 April 2015 – 2<sup>nd</sup> Detection announced on Mareeba farm and farm quarantined
- 26<sup>th</sup> & 27<sup>th</sup> April – Harvest of fruit recommences under interim protocol



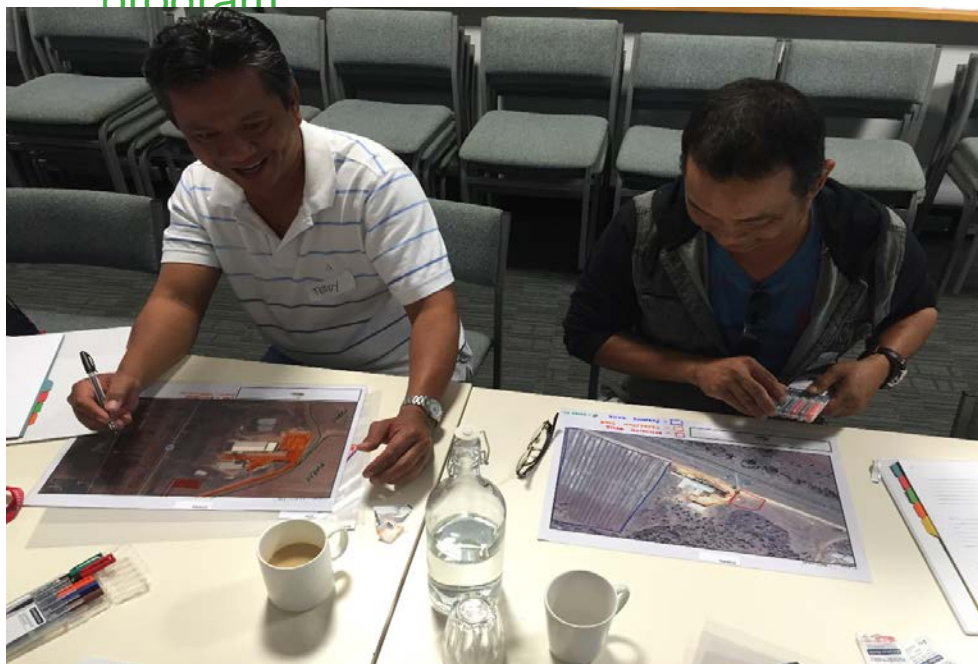
19 May 2015 – TR4 diagnosis for Mareeba farm announced as false positive, quarantine on it revoked



## Panama TR4 in Australia

## Timeline continued:

- May '15 to Nov' 16 - ABGC runs a national TR4 biosecurity training program



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## Panama TR4 in Australia

## Timeline continued:

- 24 Oct 2016 - ABGC eventually succeeds in buying infected farm, with a loan and grant from Aus Govt and grower support via national ballot for a new levy to repay it.
- Growers agree to ABGC strategy: contain disease to buy time for research results
- ABGC then destroyed all 170 ha of bananas, erected pig proof fencing and security cameras, with a grant from Qld Govt





# AUSTRALIAN BANANA INDUSTRY CONGRESS 2015

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## Panama TR4 in Australia

## Timeline continued:

- 4 July 2017- Another Tully farm owner reports suspect plants to BQ
- 11 July 2017 – BQ announce this as suspect TR4 (PCR +ve)
  - it is largest banana farm in Aust
  - 3K west of 1IP
  - notice of “TR4 affected land” issued
  - industry nervous but happy: 28 months between the 2 detections, so less spread than in other countries
- 24 July 2017 – TR4 confirmed on second property





## Queensland TR4 response

## Discussion / Issues

1. Why successful containment to date:
  - i) ABGC and both Governments working together:
  - ii) Focus on containment
  - iii) Early reporting/detection
2. Eradication not technically feasible and containment critical
3. EPPR Deed not triggered, therefore no formal compensation mechanism
4. Adoption of on-farm biosecurity critical





## Queensland TR4 response

## Discussion / Issues continued

5. Currently no real alternative use for infected land
6. Industry is continuing to learn and adapt as part of this response
7. Government support is critical to the successful containment of TR4
8. Community issue - not just a banana industry issue
9. Need to make decisions without all the information



## Thoughts for other industries

- Good biosecurity is a foundation of sustainable production
- On-farm biosecurity needs to be adopted, not just promoted
- Think now about your industry's biosecurity risks and potential responses
- Conduct training



## Future of the banana industry

- There is a future for the Australian banana industry
- We're part of a global effort to address TR4



AUSTRALIAN BANANA INDUSTRY  
CONGRESS 2015  
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# Industry Representation

Year in Review

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**John McDonald** – Nursery and  
Garden Industry Australia

2 November 2017



# Biosecurity Overview

## Nursery Production

2017



## National Biosecurity Roundtable

02 November 2017



# Nursery Production Supply Chains

## Nursery Production in Australia

- Located in every state & territory – a broadly dispersed industry, underpinning most horticulture plant industries (urban & regional), propagating 10 000+ cultivars across all cropping systems.
- A national annual value of approximately \$3 billion. Tracking along the same trajectory as agriculture, in general, with businesses increasing in size and capacity supplying high volume national markets.
- Multiple supply chains:
  - Urban retail e.g. Bunnings, retailers, etc.
  - Landscape greenlife e.g. Urban development.
  - Fruit & Vegetable e.g. Citrus, tomato, capsicum, etc.
  - Forestry e.g. Pine or eucalypt timber plantations.
  - Revegetation e.g. Riparian zones & mine sites.



# Nursery Production – Supply Chains Value

## National value of horticultural sectors supplied by

Production Nursery	Horticultural markets	Economic value
Container stock <sup>1</sup>	Ornamental/urban horticulture	\$2 billion retail value
Foliage plants <sup>1</sup>	Indoor display/hire	\$87 million industry
Seedling stock <sup>2</sup>	Vegetable growers	\$3.3 billion industry
Native and exotic forestry stock <sup>3</sup>	Plantation timber	\$1.7 billion industry
Fruit and nut tree stock <sup>2</sup>	Orchardists (citrus, mango, etc)	\$5.2 billion industry
Landscape stock <sup>1</sup>	Domestic & commercial projects	\$2 billion industry
Plug and tube stock <sup>2</sup>	Cut flower growers	\$700 million industry
Revegetation stock <sup>1</sup>	Farmers, Government, Landcare	\$109 million industry
Mine site revegetation	Mine site rehabilitation	Value unknown
	<b>Total Horticultural Market Value</b>	<b>\$15.0 billion</b>

<sup>1</sup> Freshlogic (2008) Australian Garden Market Monitor for the Year Ending 30 June 2008

<sup>2</sup> Horticulture Australia Limited (2004) Australian Horticultural Statistics Handbook

<sup>3</sup> Australian Bureau of Agricultural and Resource Economics (2008). Australian Forest and Wood Products Statistics



# Industry Biosecurity Initiatives



- **BioSecure HACCP**

- National agreement by jurisdictions to recognise BioSecure HACCP
- First non-government legal market access program for plant products
- NGIA approved for a **3 year National** trial (2016 – 2019)
- Legal Authorities in place: QLD, NSW, VIC, TAS, SA with NT & WA progressing
- Qld Biosecurity Act 2014 amended to allow third party programs to operate.

- **National Nursery Industry Biosecurity Program**

- Levy funded to 2020
- 4 Themes:
  - On-farm Biosecurity – BioSecure HACCP
  - Biosecurity Preparedness – EPPRD
  - Biosecurity Awareness – Communication and R&D
  - Minor Use Pesticide Program – pesticide approvals
- Additional component for WA – TPP T2M plus biosecurity program activities.

- **Building Resilience & On-farm Biosecurity Capacity in the Australian Production Nursery Industry**

- DAFQ project across diagnostics, pest fact sheets & management plans, contingency plans & workshops.

# Plant Biosecurity – 2017 National Exposure

- On average Australia records between 30 – 40 plant pest incursions each year. Source: Plant Biosecurity CRC
- Current ongoing responses of note to nursery production include:

- Red imported fire ant (QLD – Eradication plan)
- Chestnut blight (Vic – Response Plan)
- Banana freckle (NT – Response Plan)

- Electric ant (Qld – Eradication plan)
- Giant pine scale (Vic & SA Response Plan)
- Tomato potato psyllid (WA – Response Plan)



# NGIA - EPP Incidents 2017 (1 January to 31 October)

Scientific name (common name)	Lead Agency
1. <i>Austropuccinia psidii</i> (Myrtle rust)	Cwlth (Norfolk Is)
2. <i>Bactericera cockerelli</i> (Tomato potato psyllid)	WA
3. <i>Candidatus Liberibacter solanacearum</i> (Vegetative disorder)	NSW
4. <i>Collophora rubra</i>	VIC
5. <i>Dickeya dianthicola</i> (Black leg of potato)	WA
6. <i>Enterobacter cowanii</i>	QLD
7. <i>Eriophyes cf. exilis</i>	TAS
8. <i>Kilifia acuminata</i> (Acuminate scale)	QLD
9. <i>Lasiodiplodia citricola</i>	SA
10. <i>Liothula omnivora</i> (Common bag moth)	NSW
11. <i>Papaya meleira virus</i>	QLD
12. <i>Perenospora belbahrii</i> (Downy mildew of basil)	QLD
13. <i>Puccinia striiformis f. sp. tritici</i> , pathotype 64E64A	VIC
14. <i>Trionymus sp.</i> (root mealybug)	TAS
15. <i>Wahlgreniella nervata</i> (Strawberry tree aphid)	WA



# NGIA - EPP Incidents carried over & actioned during 2017

Scientific name (common name)	Lead Agency
1. <i>Anoplophora glabripennis</i> (Asian longhorn beetle)	WA
2. <i>Aphis forbesi</i> (Strawberry root aphid)	WA
3. <i>Colletotrichum brevisporum</i>	QLD
4. <i>Colletotrichum ocimi</i>	QLD
5. <i>Corynespora smithii</i>	VIC
6. <i>Dickeya zeae</i>	NT / QLD
7. Grapevine pinot gris virus	NSW/SA
8. <i>Lasiodiplodia brasiliensis</i> (Grape dieback)	QLD
9. Melon Necrotic Spot Virus	NSW/VIC
10. <i>Pantoea stewartii</i> subsp.nov of papaya	WA
11. <i>Papilio demoleus malayanus</i> (Lime swallowtail)	QLD
12. Pepper vein yellows virus	WA
13. <i>Phoma bellidis</i>	VIC
14. <i>Phyllotreta chotanica</i> (Radish flea beetle)	WA
15. <i>Pseudoplagiostoma sp. nov</i>	QLD
16. <i>Ramularia collo-cygni</i>	TAS
17. <i>Rugonectria castaneicola</i>	NSW
18. <i>Trichoferus campestris</i> (Velvet longicorn beetle)	QLD

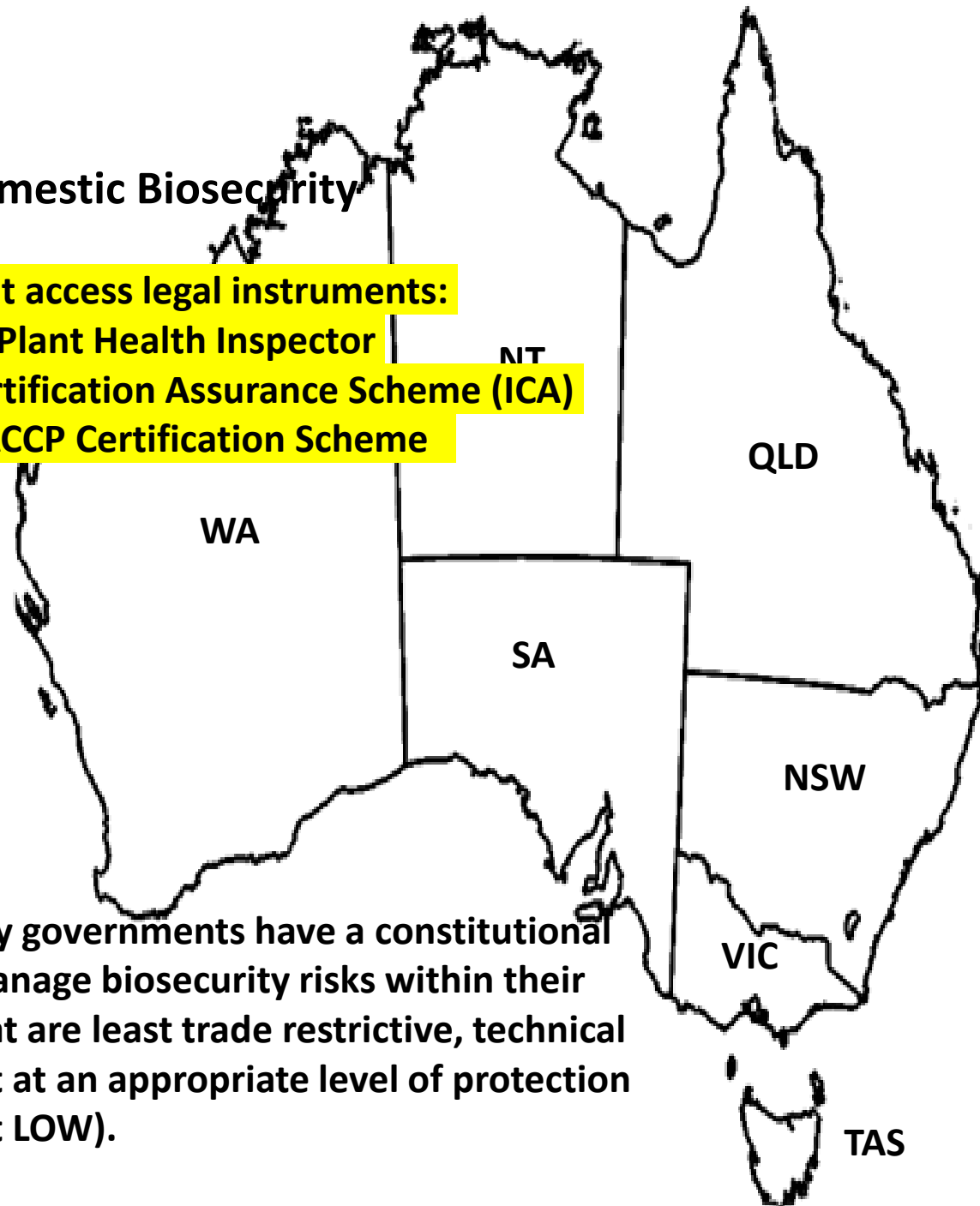
# Tomato Potato Psyllid (TTP)

- WA reported detection to OCPPO on 3 Feb 2017 ✓
- OCPPO convened CCEPP 6 Feb 2017 ✓
- NGIA noted a clear collective purpose from all parties ✓
  - Offers of assistance provided by parties ✓
- The decision regarding EPP status of TPP was made promptly ✓
- Agreement on dealing with a potential complex (TPP + Clso) ✓
  - Double edged sword – rapid EPP determination/Clso emphasis around trade
- Surveillance in WA was implemented ✓
- Timely implementation of a Response Plan in the initial stages ✓
  - Parties met in Melbourne to develop a framework – collaborative ✓
- Completion of a Response Plan – problematic ✗
- Establishment of market access – problematic ✗
- Transition to Management – positive collaborative planning (Melb Workshop) ✓
- Completing and instigating T2M – problematic ✗
- ✗ NGIA considers these areas are a reflection of under resourcing in plant health

# Australian Domestic Biosecurity

## Domestic market access legal instruments:

1. Government Plant Health Inspector
2. Interstate Certification Assurance Scheme (ICA)
3. BioSecure HACCP Certification Scheme



National  
Structure  
IGAB  
NBC  
PHC  
SDQMA  
Working Groups

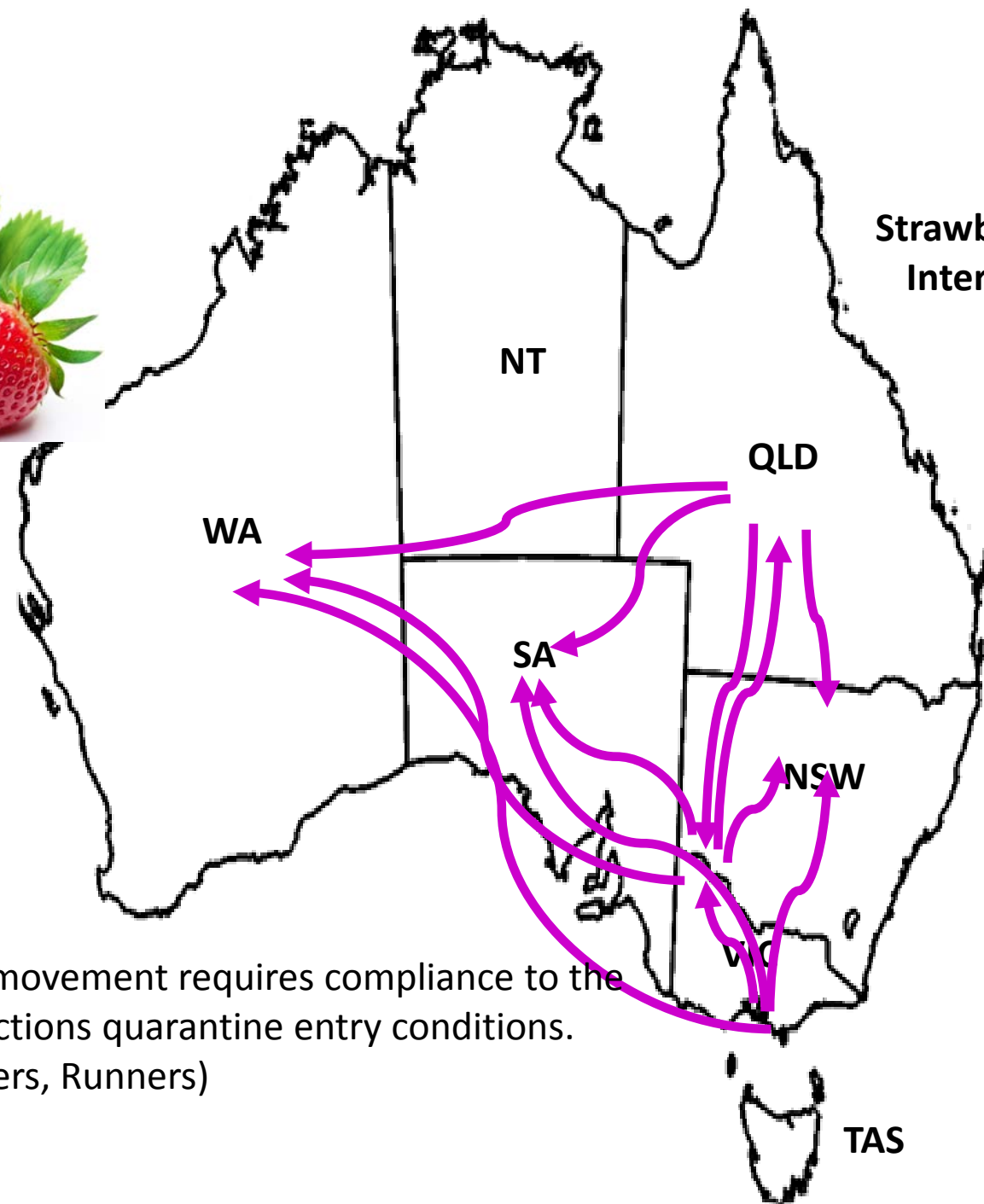


State & Territory governments have a constitutional obligation to manage biosecurity risks within their jurisdictions that are least trade restrictive, technical justified and set at an appropriate level of protection (generally set at LOW).





## Strawberry Nursery Stock Interstate Movement.



Each interstate movement requires compliance to the receiving jurisdictions quarantine entry conditions.  
(TC, Plugs, Starters, Runners)



# A harmonised domestic biosecurity system!

Labelling (specifically stated in movement control regulations – other than ICA)							
Item	QLD	NSW	VIC	SA	NT	WA	TAS
Botanical name	✗	✗	✗	✗	✗	✓	✓
Description of consignment	✗	✗	✗	✗	✓	✗	✗
Producer name	✗	✓	✗	✗	✓	✓	✓
Producer address	✗	✓	✗	✗	✓	✓	✓
Packer name	✗	✓	✗	✗	✓	✓	✓
Packer address	✗	✓	✗	✗	✓	✓	✓
Locality/district of production	✗	✓	✗	✗	✗	✓	✗
Consignee name	✗	✗	✗	✗	✓	✗	✗
Consignee address	✗	✗	✗	✗	✓	✗	✗
5mm lettering	✗	✗	✗	✓	✓	✓	✗



# A harmonised domestic biosecurity system!

Inspection rates (generally)							
Item	QLD	NSW	VIC	SA	NT	WA	TAS
600 only	✓	✗	✓	✗	✗	✓	✗
2% only	✗	✗	✗	✗	✗	✓	✗
600 or 2%	✓	✓	✓	✓	✓	✗	✓
600 or 2 % whichever is >	✓	✓	✗	✓	✗	✗	✓
Other rates	✗	✗	✗	✗	✗	✓	✗

Importer requirements for certified commodities							
Item	QLD	NSW	VIC	SA	NT	WA	TAS
Registration /accreditation	✗	✗	✓ (RIFA)	✓	✗	✓	✓
Inspection	✗	✗	✓ (RIFA)	✓	May require	✓	✓
Notification	✗	✗	✓ (RIFA)	✓	May require	✓	✓

# A harmonised domestic biosecurity system!

Harmonised Movement Conditions (excluding ICA's)							
Item (Pest)	QLD	NSW	VIC	SA	NT	WA	TAS
Tomato Yellow Leaf Curl Virus	N/A	✓	✓	N/A	N/A	✗	✓
Spiraling whitefly	N/A	✗	✗	?	N/A	✗	✗
Green snail	N/A	✓	✓	✗	✗	N/A	✓
Citrus red mite	N/A	✓	✗	✓	N/A	✗	✗
Potato cyst nematode	✓	✗	N/A	✓	N/A	✗	✗
Myrtle rust	N/A	N/A	N/A	✗	N/A	✗	✗
Red imported fire ant	N/A	✗	✗	✓	✓	✗	✗
Blue berry rust	N/A	N/A	N/A	✗	✗	✗	✗
Silver leaf whitefly	N/A	N/A	✗	✗	N/A	N/A	✗
Melon thrips	N/A	✗	✗	✗	N/A	✗	✗
Tomato potato psyllid	✗	✗	✗	✗	✗	N/A	✗

# Risks & Impacts on the Biosecurity System

- **The economic cost to industry of a failure to harmonise is increasing**
  - Losing or cancelling markets impacts on business profitability
  - Inability to access new genetic material limits production and reduces efficiencies
  - Labour costs in managing compliance are increasing
  - Compliance costs in all jurisdictions for plant producers are increasing
- **Considerable industry confusion in interpreting legal obligations**
  - Plant Health Inspectors can vary in their interpretation adding to the confusion
  - Difficult for industry to access information on entry conditions
- **Non-compliance due to complexity and loss of faith in the system**
  - Non-reporting of potential EPP's by industry a real emerging concern
  - Producers failure to comply due to complexity and cost – system at risk.
- **Undermining of system creditability due to inconsistency across jurisdictions**
  - Industry belief and support of the biosecurity system is being eroded
  - Lack of participation by industry in national initiatives e.g. surveillance
- **Reduced access to new and improved plant products**
  - International licensing of varieties limits access points for growers domestically
  - New genetic material not traded across all jurisdictions due to entry conditions/cost

# Harmonising the domestic biosecurity system:

- National domestic pest risk analysis framework
- Guidelines for drafting domestic entry conditions
- Harmonised entry conditions for pests of quarantine concern
- Uniform administrative requirements e.g. labelling, packing, consignment info
- Agreed definitions for all movement control terminology
- Standardised Plant Quarantine Manual format and storage site
- Standardised documents e.g. plant health certificate/biosecurity certificate
- Remove import inspections for consignments meeting a specific entry condition
- Adoption of electronic certification system/data management



Thank You





Australian Government  
Department of Agriculture  
and Water Resources

# Industry Representation

Year in Review

#natbioforum2017


**Rob Kerin** – South Australia  
Oyster Growers Association

2 November 2017



# SOUTH AUSTRALIAN OYSTER INDUSTRY


State of Play

- ▶ 1<sup>st</sup> February 2016 POMS discovered in Tasmania
  - ▶ Borders immediately closed to spat deliveries
  - ▶ Industry initiated stock standstill
  - ▶ All Tasmanian spat deliveries in the previous 7 days to be reported
  - ▶ All bays tested & results negative for POMS
  - ▶ 16 farms received spat from Tasmania, results negative for POMS
- 
- A series of several parallel white diagonal lines of varying lengths, located in the bottom right corner of the slide, extending from the right edge towards the bottom.

- ▶ SAOGA met regularly with Department of Primary Industries & Regions (PIRSA)
  - ▶ Manage the current situation
  - ▶ Determine future actions to assist the industry
- ▶ An assistance package developed
  - ▶ Emergency funding provided to ramp up the production of the 2 SA hatcheries
  - ▶ SA Research & Development Institute (SARDI) requested to produce spat for the industry
  - ▶ Biosecurity increased

- ▶ SAOGA managed allocation of spat to industry
  - ▶ Sustainable Aquatic Industries & Kellidie Bay Hatchery
    - ▶ 2mm spat commenced delivery September 2016
    - ▶ 74m delivered between September 2016 – July 2017
  - ▶ SARDI
    - ▶ 2mm spat commenced delivery November 2016
    - ▶ 30m delivered between Nov 2016 – June 2017
- ▶ Cameron of Tasmania
  - ▶ Joint venture with SAM Abalone – Port Lincoln
  - ▶ 30m delivered since May 2017
- ▶ Eyre Shellfish
  - ▶ New hatchery opened Cowell July 2017
  - ▶ On track to deliver 5mm spat from November 2017



- ▶ Major mortalities with 2mm spat – average 50%
  - ▶ Why?
    - ▶ Size
    - ▶ Environmental factors
  - ▶ Currently approx. 70m spat in the water since Feb 2016
  - ▶ Normal yearly spat purchases in excess 200m
  - ▶ Shortage of oysters will start prior to Xmas 2017
- 
- A series of white diagonal lines of varying lengths and thicknesses are positioned on the right side of the slide, extending from the middle towards the bottom right corner.

- ▶ Industry 'State of Play' paper being developed
  - ▶ Numbers being collected on projected sales through 2018/19
    - ▶ Preliminary numbers indicate sales will be approx. 30% of normal sales
    - ▶ More than 80 FTE lost so far.
  - ▶ PIRSA/SAOGA developing forecasts
  - ▶ SAOGA consulting with local, state & federal governments
  - ▶ Identifying what assistance is available
    - ▶ Rural Business Support Services
- ▶ Paper to be used to work with all relevant bodies to provide assistance

## ▶ Looking Ahead

- ▶ Adequate spat provided by mid 2018
- ▶ Normal supply expected to return mid 2019
- ▶ Marketing strategy required to let retailers/consumers know when oysters are back!
  - ▶ Initial discussions with FRDC already occurred
  - ▶ SA & Tassie need to work together to get funding
- ▶ Long term SA industry will be stronger & more resilient



Australian Government

Department of Agriculture  
and Water Resources

# Bringing community, industry and environment together

#natbioforum2017

Magali Wright

2 November 2017

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## Building a culture of good biosecurity practices

Magali Wright, NRM South  
[mwright@nrmsouth.org.au](mailto:mwright@nrmsouth.org.au)



Australian Government

National  
Landcare  
Program





# Biosecurity Network:

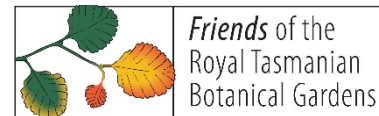
## Building a culture of good biosecurity practice

- Vision – That Check, Clean, Disinfect, Dry becomes universal practice in Tasmania
- Delivering - a shared communication action plan including consistent, layered messages tailored for direct engagement of different user groups



# Our approach:

- Focus on prevention rather than the problem species
- Tailor messages for high risk activities
- How: Hygiene protocols (CCDD) and other biosecurity controls
- Who: everyone moving around Tasmania's natural and productive landscapes
- When: with every visit



# What we do

- Biosecurity Network – coordination of member biosecurity activities and communications to share effort and resources
- NRM South - supports on-ground community projects, direct engagement, tailored support, provision of biosecurity kits and products





# Biosecurity Network projects

- Shared communications plan
- Shared displays at key events
- How to videos
- Signage
- Biosecurity training for hobby farmers
- Biosecurity survey





1:40

[www.nrmsouth.org.au/biosecurity](http://www.nrmsouth.org.au/biosecurity)





# Direct engagement and tailored support

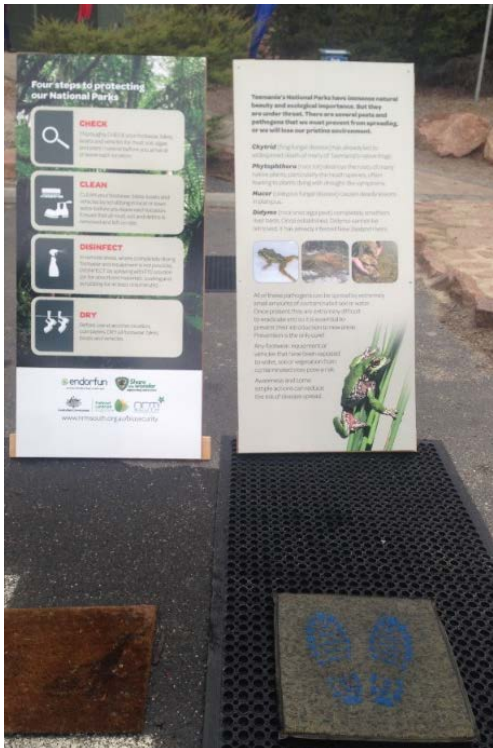
- Biosecurity planning for specific community events and activities
- Community groups, tourism operators, farmers and event organisers



# On-ground community projects and biosecurity kits

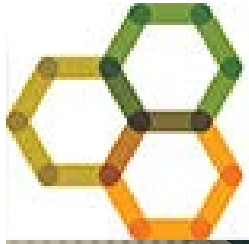
## Two models for on-ground community projects

- Specific Biosecurity EOI
- Biosecurity funding incorporated into NRM South grants





# Supporting people to work together



LBN



*Huon Agricultural Society Inc*



# www.nrmsouth.org.au/biosecurity

## ACTIVITY RESOURCES

Click on the resource links below for how-to information on *Check, Clean, Disinfect, Dry* practices for your activities.

### RECREATION

#### Mountain biking



#### Fishing



#### Off-road driving



### Research & Field work



## WORK

### Farming



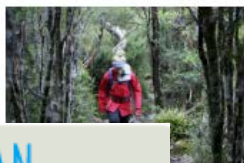
### Planning works



#### Travelling



#### Bushwalking



#### Kayaking



#### On-site works



#### Building



## LANDHOLDER SERIES FARM BIOSECURITY PLANNING GUIDE



### FARM BIOSECURITY

Tasmania's reputation as a relatively weed, pest and disease free island opens many doors for our agricultural industries. Keeping weeds, pests and diseases out of Tasmania and its off-shore islands, and limiting the spread of those already here, is key to a healthy environment and economy.

If biosecurity risks are not mitigated, human health can be impacted and a whole industry closed overnight. Public perception of risk can be as damaging to an industry as real risks. The government, industry and community all have a role to play in activities that help to maintain Tasmania's enviable reputation.

Farm biosecurity is a set of measures put in place to protect a farm from the entry and spread of weeds, pests and diseases. It can be any activity that reduces the likelihood of the introduction and spread of unwanted organisms. Undertaking farm biosecurity activities can benefit farm profitability by improving the





# Resources

## NRM South

- Website [www.nrmsouth.org.au/biosecurity](http://www.nrmsouth.org.au/biosecurity)
- Videos for fishers, bushwalkers, kayakers, researchers and more
- *Keeping it Clean* manual
- Hygiene kits
- Demonstration bootwash down

## Biosecurity Tasmania

- On-line resources on pests, weeds and pathogens

## Livestock Biosecurity Network

- Farm-based Biosecurity Action Planning
- On-line checklist

## Parks and Wildlife

- Bootwash down stations
- Discovery Rangers
- Mobile hygiene units

## NRM North

- Mountain bike washdown unit



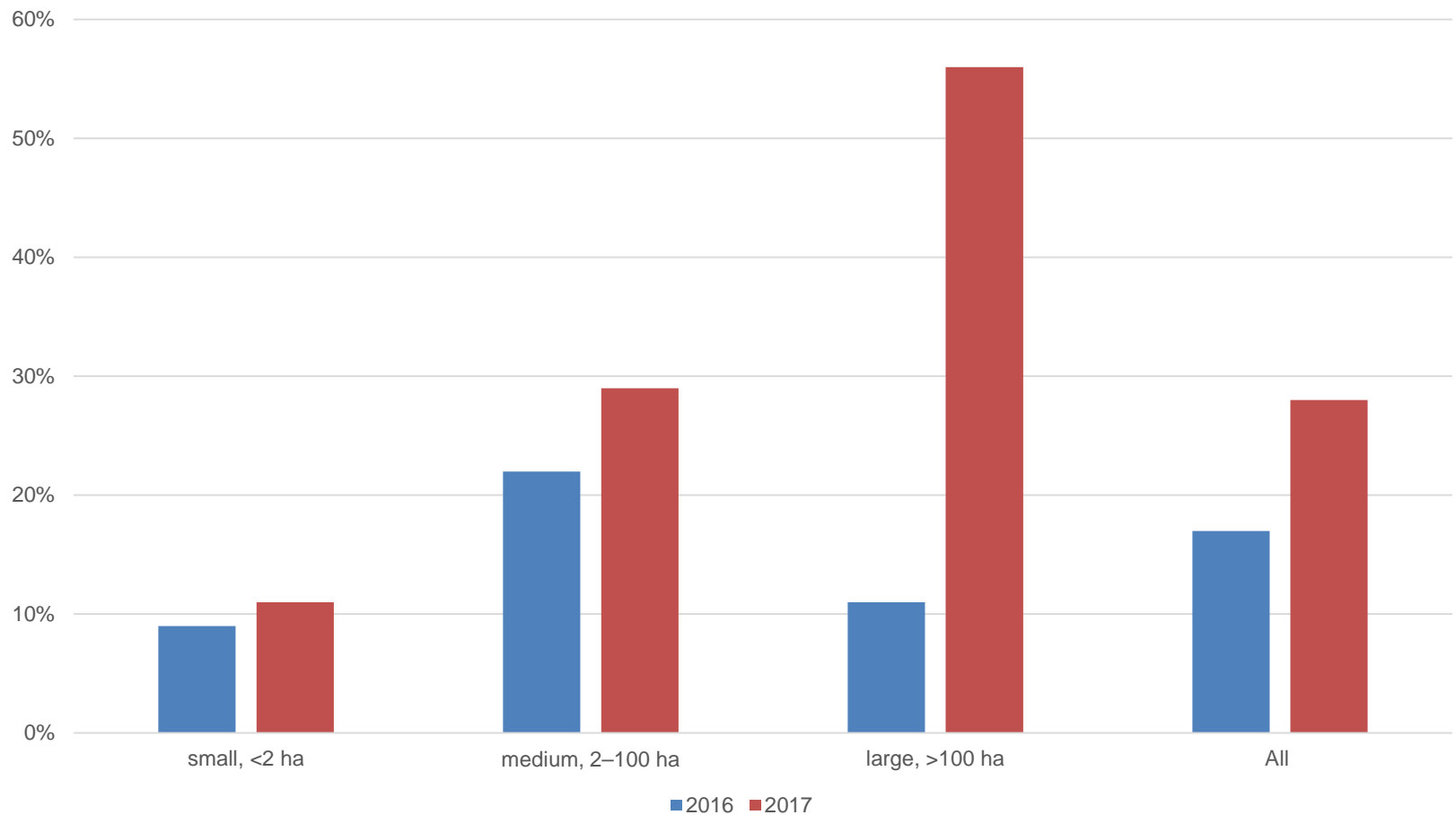


# What we have learned

- Coordination and facilitation is key to projects highlighting agricultural and environmental biosecurity
- Identifying buy-in for each partner
- Maintain contact and work on practical solution over time
- Highlight the shared cost and impact of poor biosecurity practices
- Annual survey to aim program design acts as engagement tool



# Farm Biosecurity planning



**VISITORS**

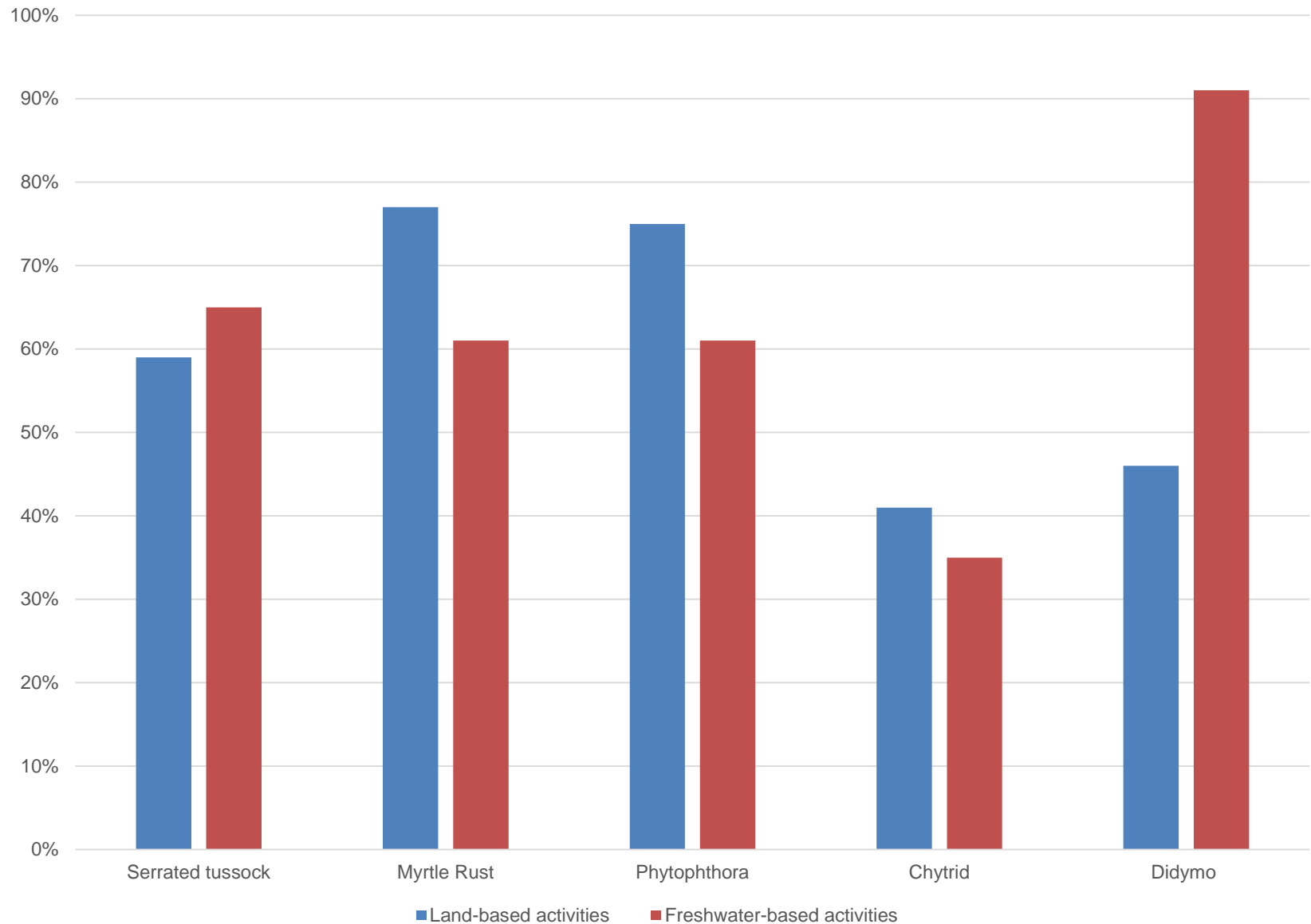
**PLEASE RESPECT  
FARM BIOSECURITY**

Please phone or visit the office before entering.

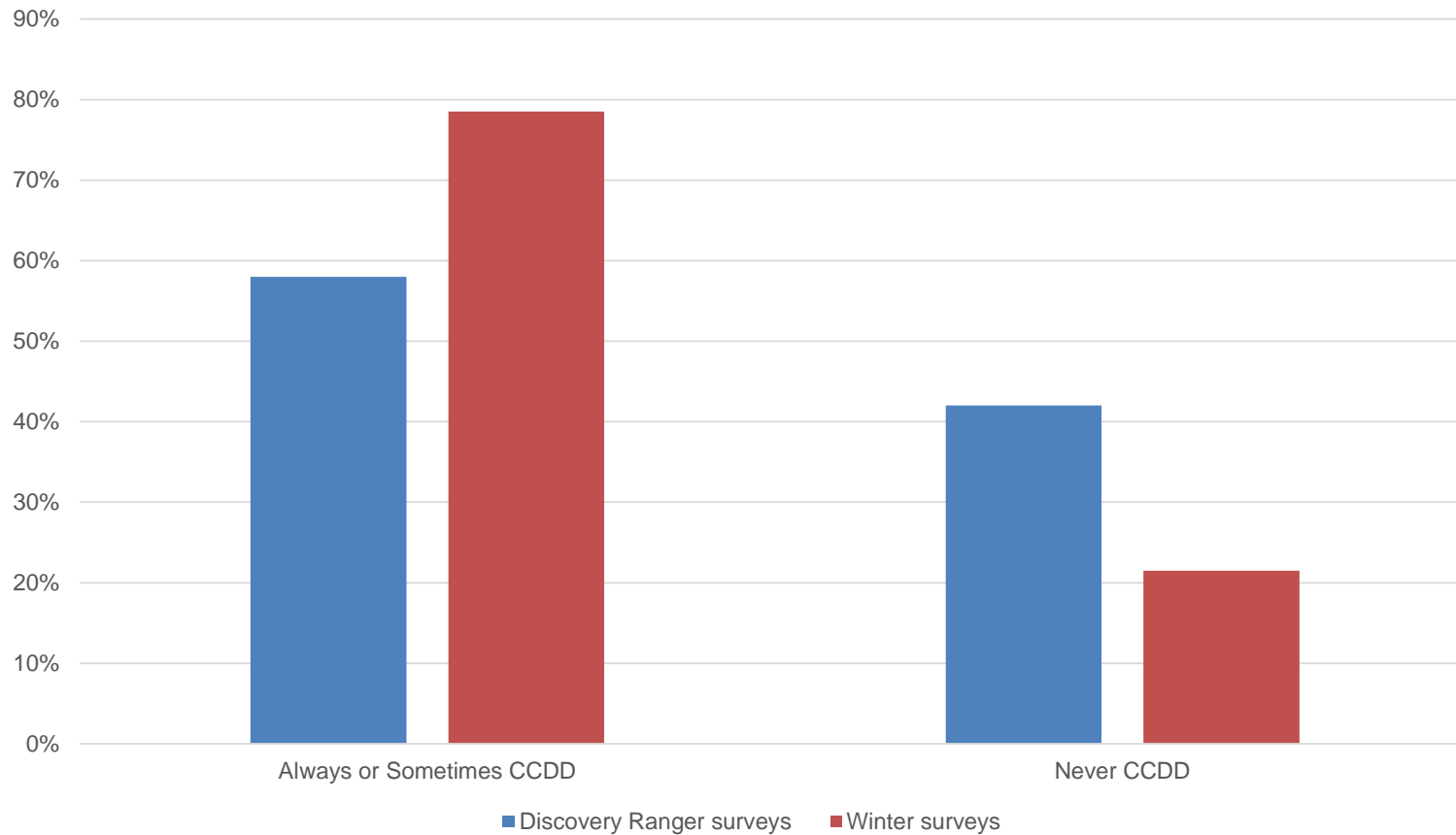
Do not enter property without prior approval.



# Awareness of biosecurity threats



# Are people using CCDD?





# Moving forward

- Under NLPP2 there is a separation of funding for agricultural and environmental biosecurity
- Environmental biosecurity only linked to nationally significant assets
- Momentum and partner involvement in our coordinated approach
- Replicable model





# Lunch

Please return to your seats by 2:00pm

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## Workshop

Barriers to reporting –  
what are they and how  
do we break them down?



**Karina Keast**

2 November 2017

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# Early reporting is important

- We have systems in place to respond quickly to the detection of pests and diseases
- Rapid intervention and response can potentially minimise the spread and impact of a pest or disease.
- Industry surveillance remains an important source of information
- Reluctance to report is regularly identified in literature reviews and surveys
- What does our biosecurity community think?

# Our biosecurity community

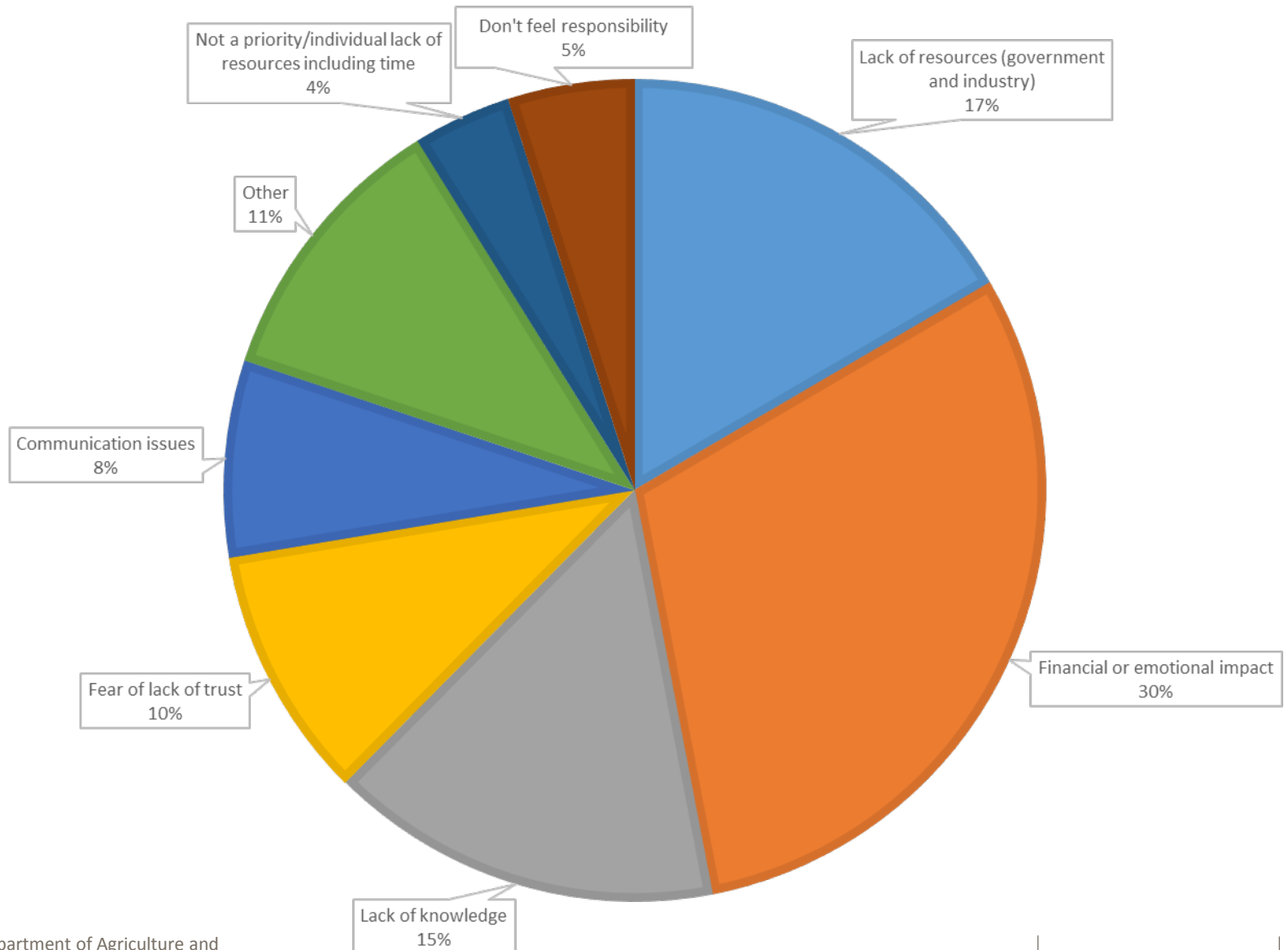


# Why don't people report pests or diseases?

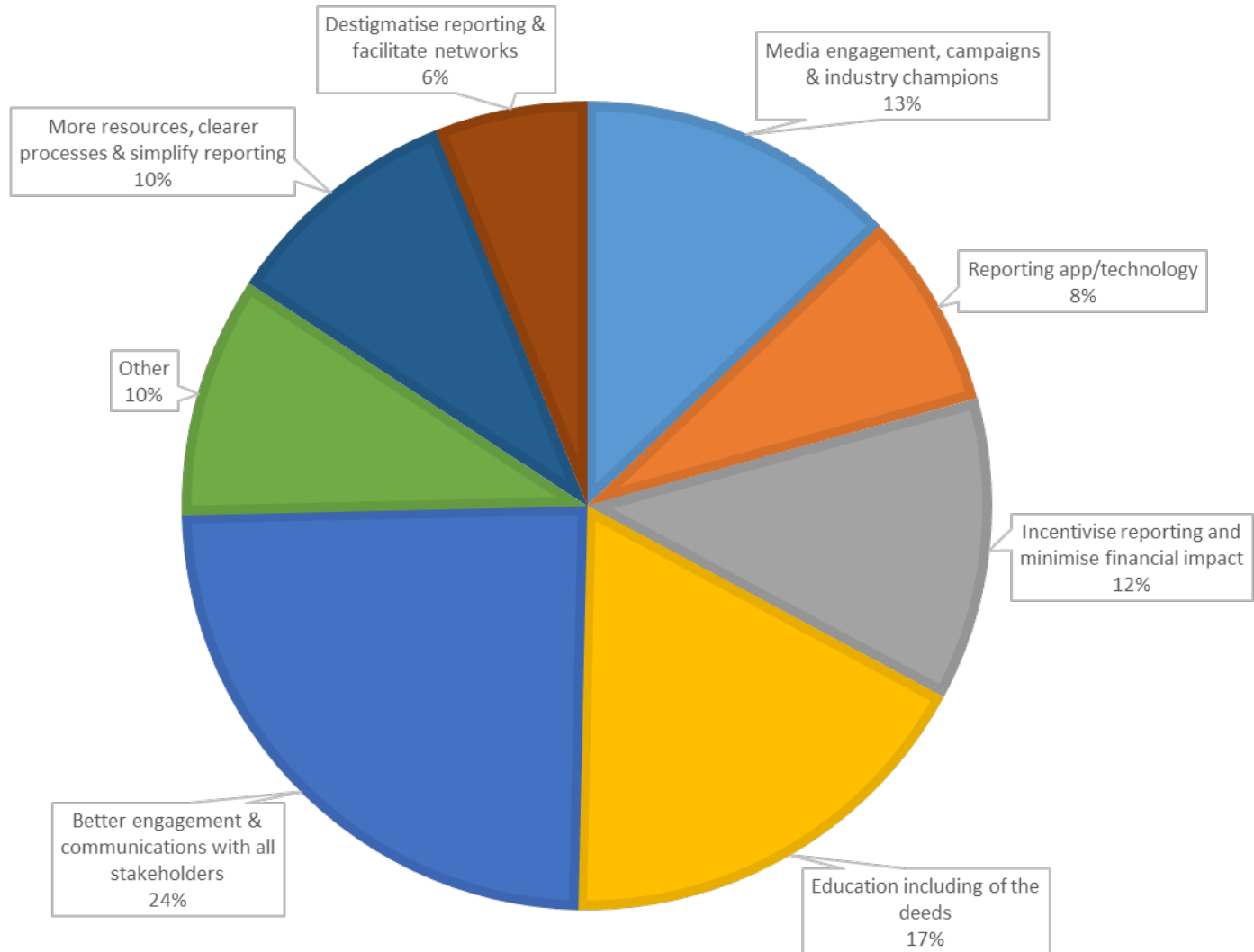
- Biosecurity does not relate to daily life – not front and centre, don't actively look for information
- People don't realise how an incursion could affect their lifestyle
- Fear of the marketplace and being 'made an example'
- Fear of the response "the government will come and kill everything"
- Cultural attitude "she'll be right mate", "don't want to dob in the neighbour"
- "I don't have the resources" or "I don't know how to report"
- "I don't know what I'm looking for – what if I'm wrong?"
- "It's not my job – that's what government does"



## WHY DON'T PEOPLE REPORT PESTS AND DISEASES?



## HOW CAN BARRIERS BE ELIMINATED? HOW CAN WE ENCOURAGE REPORTING?



# Breaking down the barriers...

- The information needs to come from the right person, the person I trust
- We should promote good news stories – recovery, successful eradication – not just the bad
- Why don't we celebrate and promote successful reporting by citizen scientists?
- Make better use of horticultural and agricultural media
- Make reporting easier – make an app! – and remove the stigma
- Make finding biosecurity information easy
- Teach 'em young – biosecurity in schools

# Government led actions

- A: Review existing and proposed material (websites, fact sheets etc) to ensure language is easy to understand and messages are consistent
- B: Scope the development of a national 1800 biosecurity hotline
- C: Broaden biosecurity engagement to include schools, retailers, zoos, museums
- D: Promote and/or develop biosecurity reporting apps
- E: Use and promote different forms of communication in different languages (eg Social media, YouTube, 'have your say', Public forums, mail outs, community leaders, trusted advisors)

# Industry led actions

- A: Appoint industry biosecurity champions to deliver biosecurity messages
- B: Develop and actively promote real life stories/case studies from affected producers, especially good news stories
- C: Promote and/or develop reporting apps
- D: Education campaign focused on “it’s ok to report” to reduce the stigma and fear associated with reporting
- E: Industry led, targeted biosecurity training



# Where to from here?

- Report back to next year's national forum on actions taken to reduce barriers
- Use the state/territory roundtables to share messages, highlight solutions, build networks, launch resources...
- Can you share your experiences with another industry?

# Thank you



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and Water Resources

## Workshop

Industry and community  
roles in biosecurity



**Jo Laduzko**

2 November 2017

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# Social Attitudes and Understanding of Biosecurity

The survey explored how biosecurity is understood within the broader community, the farming sector and producers who export their product.

## Key findings from the survey:

- The general public has a very low understanding of biosecurity
- Shared responsibility is not readily understood by the community
- Biosecurity is seen as a word without a narrative
- Biosecurity plans are not a first priority for many
- Producers who export are more likely to understand biosecurity, shared responsibility and market access requirements



# Community Perspectives

- 57% believe they know what biosecurity means but 28% of those people can't say what it means
- 87% had heard of quarantine, with 67% believing they know enough to determine the risk of things coming into the country
- 58% believe it's government's responsibility to tell them the rules
- 53% believe the system is working because there has been no major outbreaks and 45% think it unlikely there will be an outbreak in the next 12 months

Understanding of the term biosecurity	%
Stopping pests and diseases	37
Protecting the environment	12
Bringing things into the country	4
Keeping areas safe from biological hazards	3
Making sure human diseases don't enter Australia	3
Keeping farms free of pests and diseases	3
Chemicals	2
Biology/Science Related	2
Germ/Chemical Warfare	1
Quarantine	1
Sustainability of Native Plants (i.e. a seed bank)	1
Keeping animals and plants healthy	1
Identity checks – fingerprints, eye scans	1
Genetically Modified Foods	1
<b>Unsure</b>	<b>23</b>
Don't know/ Refused	5



# Community Perspectives

81% agree pests or diseases coming into the country could cause damage

79% agree that it is everyone's responsibility to stop this happening

66% were interested in which pests and diseases were of concern and what they should look out for

Few people have ever reported anything suspicious

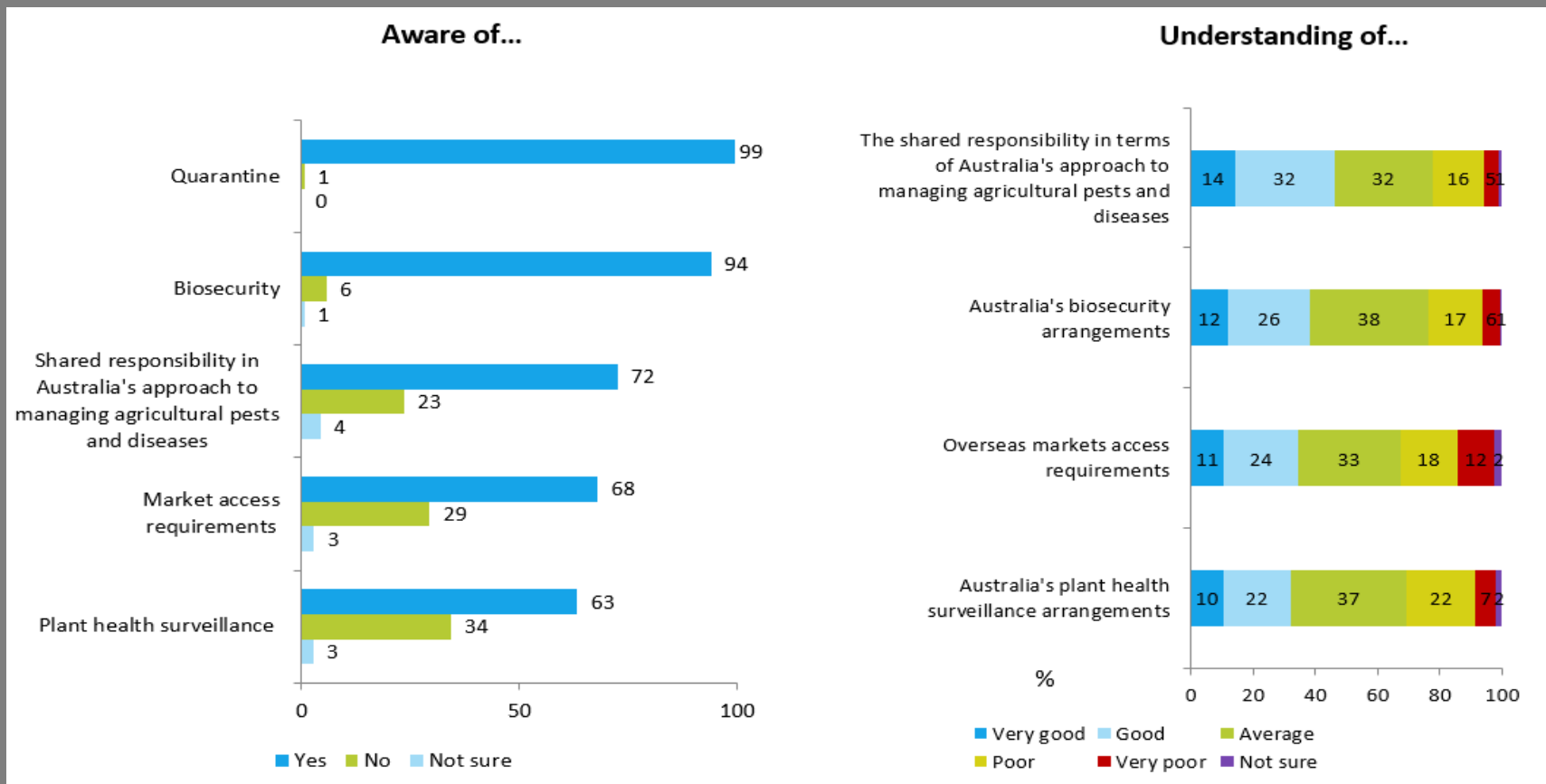
Most people don't know what sort of things they should report and don't know where to report



52% are interested in being involved in a community activity

A further 29% are ambivalent (but open to being persuaded)

# Producer awareness and understanding of biosecurity



# Producer awareness and understanding of biosecurity

60%

describe biosecurity as controlling diseases

*and*

53%

describe biosecurity as controlling pests

67%

of plant farmers describe plant health surveillance as regularly checking their plants

*but*

22%

don't know what it means

88%

support Australia's biosecurity measures

*and*

56%

believe they know more about biosecurity than they did 3 years ago

35%

rate their knowledge of export market access good or very good.

*and*

22%

see biosecurity measures as securing or improving markets

## implementing biosecurity

Experience-based (i.e. what they do on the farm) and not knowledge-based. They do what is required of them to meet market access certification.

## biosecurity plans

32% don't know if their industry has a plan  
59% don't have a biosecurity plan for their farm and 71% don't have a surveillance plan (within their biosecurity plan or separate)  
36% don't keep monitoring or surveillance records (unless required)

## shared responsibility

Agree in principle but when resources are cut it costs farmers more. Not necessarily shared understanding. Want to see a plan to achieve its objectives

## identifying and reporting

96% would report anything they couldn't identify  
More would report IF they knew what to look for (had an easy reference guide), who to report to, and knew losing their product and/or market would be a last option

# Responses to ‘What stops you or your members from having a biosecurity plan?’

Not seen as relevant – never had an issue

*Didn't know we  
needed one*

*Costs too high*

Not valued

‘Visitors’ don’t respect to rules anyway

No point as others  
don’t have plans

No information  
or support

*Too many other priorities*

# Responses to ‘What might encourage the uptake of biosecurity plans?’

- Education around the advantages
- Readily accessible information and assistance, including industry mentoring
- Financial support
- Greater incorporation of plans into accreditation schemes, farm finance or government requirements
- Governments should enforce the laws
- Greater focus on industry/supply chain, region plans
- Increase community awareness to help manage risk
- Reduce complexity



## **What can we do to improve biosecurity planning outcomes?**

Discuss what government, industry and community can do in this space – individually and together — to help.

Record as a group on the A3 paper on your table

# Poll Everywhere

**Question 1:** What are the 1-3 things that would help your biosecurity planning?

# Poll Everywhere

**Question 2:** In 2018, do you think you will:

- a. attend relevant state roundtables
- b. nominate a sister organisation to attend state roundtables
- c. attend only national forums
- d. attend both your state and national roundtables and forums
- e. encourage your state branches to attend state roundtables
- f. forward invites to other participants
- g. not attend any further meetings
- h. receive updates or available newsletters

Thank you



Australian Government  
Department of Agriculture  
and Water Resources

## Closing remarks



#natbioforum2017

Josephine Laduzko

2 November 2017

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# Afternoon tea

Thank you for attending the 2017 Biosecurity National Forum.

Roundtable secretariat

1800 068 468

Biosecurityroundtable@agriculture.gov.au

#natbioforum2017