

BIOSECURITY ATTITUDINAL RESEARCH RESEARCH REPORT

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1. Background and Research Objectives.

1.1. Background

As part of the New South Wales Department of Industry the New South Wales Department of Primary Industries (DPI) is responsible for a range of activities related to natural resources, industry engagement, pest and disease management and food safety¹. In addition, DPI fulfils a strategic and operational leadership role within the NSW Government in managing biosecurity risks (including animals, plants and diseases), developing safe markets for food and agricultural produce, and responding to emergencies.

In order to secure NSW's \$12billion primary industry sector, a new strategic vision to holistically manage biosecurity has been developed. The NSW Biosecurity Strategy 2013 – 2021 (the Strategy) ² outlines this vision and emphasises the importance of a shared responsibility in protecting NSW's primary industry sector. Additionally the Strategy outlines that biosecurity practices should be upheld with individuals and the community, as well as industry, government, research organisations, museums and universities.

In 2016 DPI recognised that to date limited research that gauges industry and community awareness, appreciation and knowledge of biosecurity has been undertaken³. In order to inform the development of policy and communications to support the Strategy, research is therefore needed to benchmark industry and community understanding of biosecurity and preventative practices.

1.2. Research objectives

DPI commissioned this research in order to establish a benchmark of awareness and understanding of biosecurity across the NSW community and with farmers. Additionally the findings of the research will be used to assist in the development of materials, frameworks and communications to support the implementation of new biosecurity legislation and the NSW Government's Biosecurity Strategy.

Two key target audiences for the research were identified: NSW general population and primary producers. Within each of these target audiences the specific objectives set for the research included:

- Measure understanding level and explore meaning of biosecurity, particularly in relation to the environment, plants, invasive species, animals, pests and aquatic life;
- Determine level of awareness of biosecurity issues and challenges and associated knowledge of how to manage them;



¹ Department of Primary Industries, accessed July 2016 at http://www.dpi.nsw.gov.au/about-us/who-we-are

² Department of Primary Industries Strategic Plan 2013-2021, accessed January 2017 at http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0005/467699/NSW-biosecurity-strategy-2013-2021.pdf

³ Department of Primary Industries project brief

- Determine participation level and behavioural gaps towards biosecurity practices and barriers to following best practice biosecurity practices;
- Determine level of awareness and use of biosecurity management programs and tools; and
- Identify sources through which the target audiences' receive information on biosecurity and appetite for information sources moving forward.



2. Methodology Overview.

To deliver the research objectives a mixed methodology approach has been used, the stages of which are detailed in the diagram below.

1/ Project design

Workshop

Review of prior research / literature (including prior survey tools / data sets)

2/ Qualitative fieldwork

2 x regional case studies (Tamworth and Merimbula) with each comprising:

- 1x focus group with general population
- 1x focus group with primary producers
- 6 x stakeholder / business consultations per location

1 x metropolitan (Sydney) case study comprising

- 4x focus groups with general population
- 30 x stakeholder consultations (peak bodies and agribusinesses)

3/ Quantitative fieldwork

General Population

- Methodology: Online survey
- Sample size achieved: n=1149

Primary producers:

- Methodology: Telephone survey
- Sample size achieved: n=400

Online survey for opt in participation by peak body groups

4/ Analysis and reporting

Preliminary presentation of high level findings

Written report detailing findings by audience group

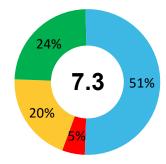
Insight presentation and implications workshop

Notes:

- As the research was conducted across all major regions of NSW, quotas were imposed to
 ensure sufficient numbers of surveys in each region to allow for separate analysis to be
 conducted and comparisons made.
- Data was then post weighted in accordance with core sample characteristics.
- Additional methodology detail and analysis protocols are contained within Appendix A.

3. General Population: Executive Summary.

IMPORTANCE



■Low' 0-3 Rating ■4-5 Rating ■6-7 Rating ■High' 8-10 Rating

51% of the NSW population rated biosecurity as being an issue of 'high importance' to NSW, with a further 24% rating biosecurity as being an issue of 'somewhat importance'

- Females rated overall importance higher than males.
- Those aged 30-39 rated overall importance lower and those aged 70+ rated it higher.
- Those from the Murray, North Coast and Northern Tablelands regions rated overall importance higher.

TOP 5 DRIVERS OF IMPORTANCE

1 Food safety (8.3)

Public health (8.2)

3 Marine life and water ways (8.2)

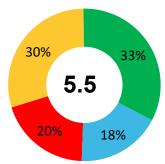
4 Agricultural industry (8.1)

5 Native flora and flora (8.1)

The importance that biosecurity is seen to have in regards to other factors that it may impact was assessed.

- Males ranked the importance of biosecurity to each factor than significantly lower did females.
- Younger age groups (especially those aged 18-39) ranked the importance of biosecurity to each factor lower than older age groups (especially those 60 plus).
- Those located in the Central Tablelands, North Coast and Western regions ranked the importance of biosecurity higher across a range of factors, and those in the South East region ranked importance lower across a range of factors.

ABILITY TO ACT



■ Low' 0-3 Rating ■ 4-5 Rating ■ 6-7 Rating ■ High' 8-10 Rating

- Males rated their ability to act significantly higher than did females.
- Those aged 18-39 rated ability to act significantly higher and those aged 60-69 as significantly lower.
- Those located in the Hunter, North West, Northern Tablelands and Riverina regions rated ability to act significantly lower than the population at large.

TOP 5 BEHAVIOURS

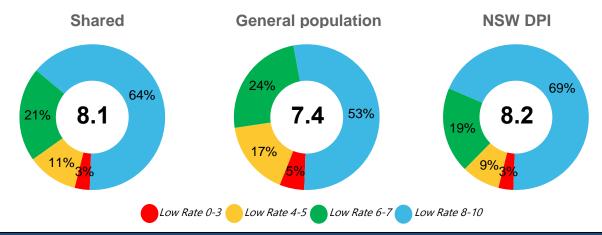
Be vigilant about meeting all quarantine requirements at the airport (81%)
Dispose of garden weeds only through council approved collections (77%)
Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (76%)

4 Wash vehicle if been off road (66%)

Disposing of aquarium fish and weeds appropriately (64%)

- Females are less likely than males to regularly perform a range of desired biosecurity behaviours.
- Behaviours by age is highly variable, with younger age groups more likely to belong to community groups and report concerns, and older ages more likely to be vigilant at airport, not purchase weeds and dispose of weeds properly.

WHERE RESPONSIBILITY SEEN TO SIT



- Perceptions as to where responsibility for biosecurity sits are predominantly centered upon government, followed by primary producers and related industry groups.
- There is some awareness that the general population and the individual do have some level of
 responsibility for biosecurity (53% and 54% respectively), however the relative level of this
 responsibility is significantly below the perceived accountability government, primary producers and
 associated industry groups are tasked with.
- 67% see responsibility to be shared between government and industry, versus 64% who see that responsibility is a shared responsibility between the government, industry and the general population.

APPETITE FOR ACTION: Top 5 strategies to prioritise

- 1 Increased biosecurity surveillance at international borders (8.0)
- 2 Increased focus on biosecurity at the state government level (7.9)
- 3 Increased focus on biosecurity at the federal government level (7.9)
- Increased focus on biosecurity among primary industry (agriculture, forestry and fishing) (7.8)
- Increasing awareness / understanding had among general population as to what a biosecurity-related issue or risk is (7.8)
- Females attach a higher level of relative priority to measures aimed at increasing awareness than measures aimed at increased communication. They also rated the priority of each measure as being significantly higher than did males.
- Older age groups tended to rate the importance of each measure as higher than younger age groups.
- Those living in the Central Tablelands, Murray, North Coast, North West, Riverina and Western regions rated the importance of measures higher.

APPETITE FOR ACTION: Uptake of initiatives

- Purchasing plants that are industry certified as being biosecurity compliant (6.7)
 - Purchasing grocery items that are industry certified as being biosecurity compliant (6.7)
 - 3 Learning more about biosecurity (6.6)
- Receiving fact sheets or checklists about best practice biosecurity measures (6.3)

5

- Doing business with companies that have biosecurity plans in place (6.0)
- High levels of personal appetite for targetted action that would promote biosecurity in the future were evident for specific industry accreditation schemes; however, lower levels of interest were apparent when such accreditation was suggested in more general terms.
- Only 51% would download an app and only 42% would attend a workshop or seminar.

4. General Population: Detailed Findings

4.1. Understanding of 'biosecurity'.

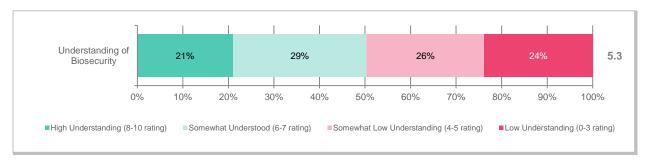
4.1.1. Self-assessment of level of understanding of what the term 'biosecurity' means.

Within the survey, respondents were asked to rate their level of understanding as to what the term 'biosecurity' means.

21% rated their level of understanding as 'high', and a further 29% rated their level of understanding as 'somewhat understand', leaving 50% who rated their level of understanding as being 'somewhat low' (26%) or 'low' (24%).

These finding show that the majority of the general population do not currently believe they have a strong understanding of what the term 'biosecurity' refers to, indicating that a widespread gap exists.

Q2: How would you rate your understanding as to what the term 'biosecurity' means?



Base (total General Population sample) n= 1149

Examining the self-rated levels of understanding of what the term 'biosecurity' means across key sub groups within the NSW general population:

By gender:

Males rated their overall level of understanding higher than females.

By age:

 Those aged 40-59 years rated their overall level of understanding as being higher than did those aged 60+.

And by region:

- Those in the South East region rated their overall level of understanding of biosecurity as being significantly lower than those from other regions.
- Those located out of town rated their understanding lower than did those living in town.

For full tabulations of data for 'Q2 - Self-assessment of level of understanding of term 'biosecurity' refer to Appendix C: General Population – Analysis Tables.



4.1.2. Actual understanding of what the term 'biosecurity' means.

Respondents were asked to provide detail, (via a free text response), as to what they understand the term 'biosecurity' to mean.

At an overall level: 24% of the population linked biosecurity to 'security of environment, biology and/ or land,' and a further 21% to the 'prevention or spread of diseases, viruses and/ or germs'. 22% stated 'don't know.'

When the above results are cross referenced to the self-rated level of understanding of what the term 'biosecurity' means:

- Among those who rated their understanding of the term 'biosecurity' as 'high', widespread reference was made to 'security of environment, biology and/ or land'.
- 45% who rated their understanding as 'low' gave a response of 'don't know'.
- 14% of those who rated their understanding as 'high' were also unable to articulate what they understood the term to be.

Q3: What do you understand to be meant by the term biosecurity?

Biosecurity understanding (groupings of free text response)	Total Sample	High level of understanding (8-10 rating)	Low level of understanding (0-3 rating)
Base (n=)	(1149)	(254)	(306)
Environmental/ Biological/Land Protection/ Security	24%	24%	18% ↓
Prevention or spread of diseases, viruses and/ or germs	21%	33% ↑	11% ↓
Prevent/Control Pests	13%	15%	8% ↓
Chemical Hazards/Spays/Harmful substances	9%	4% ↓	7%
Protect/security of plants/animals/Agriculture	8%	10%	1% ↓
Safety and Security (Gen)	4%	3%	7%
Fingerprint/retina scan	2%	3%	0% ↓
Border Control/Protection/Quarantine	2%	2%	1%
Other	11%	15%	8%
Don't Know	22%	14% ↓	45% ↑

Base (total General Population sample) n=1149

Examining what is understood by the term 'biosecurity' across key sub groups within the NSW general population:

By gender:

No key differences apparent.

By age:

Those aged 18-39 were significantly more likely to state 'don't know'.



• Those aged 40-59 were significantly more likely to define 'biosecurity' as being the 'prevention or spread of diseases, viruses and/ or germs'.

And by region:

- Those located in the Central West and the Riverina were significantly more likely to mention 'prevention or spread of diseases, viruses and/ or germs'.
- Those located in the Central West were significantly more likely to mention 'protect security of plants / animals / agriculture'.
- Those located in the Riverina were significantly more likely to mention 'prevent / control
 pests'.
- Those located in the Central Tablelands were significantly more likely to mention 'environmental / biological / land protection / security'.
- Those located in the South East were significantly more likely to state 'don't know'.

For full tabulations of data for 'Q3 - Actual understanding of what the term 'biosecurity' means' refer to Appendix C: General Population – Analysis Tables.

4.1.3. Rating of definition quality.

During the survey, members of the general population were also asked to rate the quality of a range of biosecurity definitions, (i.e. the extent it was felt each was a good definition of biosecurity based on their own understanding).

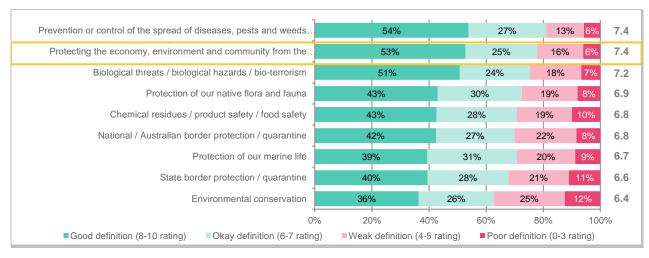
The highest rating of quality was received for the definition 'prevention or control of the spread of diseases, pests and weeds through plants and livestock'.

• 54% of the population rated this as being a good definition.

Within this list, the definition of biosecurity currently being used by NSW DPI was also included, namely: 'protecting the economy, environment and community from the negative impacts of pests, diseases, weeds and contaminants'. 53% of the population rated this as being a good definition, and it was rated second highest amongst the definitions provided.



Q4: Below is a list of statements that others have made to define what they believe biosecurity to be. To what extent do you feel each of these is a good definition of what biosecurity is based on your own understanding?



Base (total General Population sample) n= 1149

Examining responses against key sub groups within the NSW general population:

By gender:

• Females were significantly more likely to rate the quality of all provided definitions of biosecurity higher than did males, with the exception of 'protection of our native flora and fauna' and 'biological threats / biological hazards / bio-terrorism' - where there was no difference in ratings by gender.

By age:

- Those aged 30-39 rated the quality of all provided definitions of biosecurity lower than did the population at large.
- Those aged 50-59 rated the quality of the definition 'protection of our native flora and fauna' higher than did the population at large.
- Those aged 70+ rated the quality of all provided definitions of biosecurity higher than did the population at large.

By region:

- Those from the North Coast, Riverina and Western regions rated the quality of the definition 'protecting the economy, environment and community from the negative impact of pest, diseases, weeds and contaminants' higher than did the population at large.
- No differences in rating of the preferred definition 'prevention or control of the spread of diseases, pests and weeds through plants and livestock' were apparent by region.
- Those living out of town rated the preferred definition 'prevention or control of the spread of diseases, pests and weeds through plants and livestock' higher than did the population at large.

For full tabulations of data for 'Q4 - Rating of definition quality' refer to Appendix C: General Population – Analysis Tables.



4.2. Perceived importance of biosecurity.

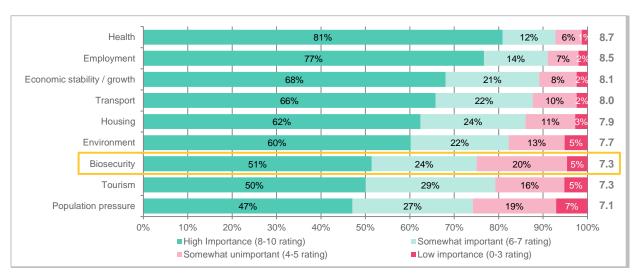
4.2.1. Relative importance versus other issues facing NSW

51% of the NSW population rated biosecurity as being an issue of 'high importance' to NSW, with a further 24% rating biosecurity as being an issue of 'somewhat importance'.

While the above result shows that the majority of the population rated biosecurity as being important, the relative importance placed on biosecurity is significantly lower than is placed on other issues facing NSW such as:

- Health (81% rate as being of 'high importance').
- Employment (77% rate as being of 'high importance').
- Economic stability and growth (68% rate as being of 'high importance').
- Transport (66% rate as being of 'high importance').
- Housing (62% rate as being of 'high importance').
- Environment (60% rate as being of 'high importance').

Q1: How important do you feel the following issues are for NSW?



Base (total General Population sample) n= 1149

Examining responses by key sub groups within the NSW general population:

By gender:

- Females rated the importance of biosecurity higher than did males.
- NB: the above result reflected the general trend for females to rate all issues as being of higher importance.

By age:

 Those aged 30-39 rated the importance of biosecurity as being lower than did the population at large.



• Those aged 70+ rated the importance of biosecurity as being higher than did the population at large.

By region:

- No difference in the level of perceived importance of biosecurity was apparent on the basis
 of being located in town versus out of town.
- Those from the Murray, North Coast and Northern Tablelands rated the importance of biosecurity as being higher than the population at large.

For full tabulations of data for 'Q1 – Importance relative to other issues facing NSW' refer to Appendix C: General Population – Analysis Tables.

4.2.2. Relative economic, environmental and social impact

Respondents were also asked to assess the relative importance of biosecurity in terms of economic, environmental and social impact, as defined below:

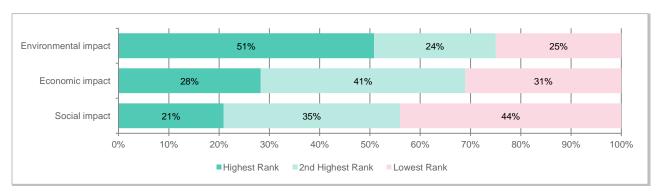
- Environmental impact i.e. the impact an adverse biosecurity issue or event could have upon our fauna and flora, landscape and ecosystems.
- Economic impact i.e. the impact an adverse biosecurity issue or event could have upon primary industries, the broader NSW economy, our trade and tourism, etc.
- Social impact i.e. the impact an adverse biosecurity issue or event could have upon our health and wellbeing, our recreational resources, how we view Australia and how the rest of the world views us.

The overall level of importance that biosecurity has in terms of 'environmental impact' is seen to be significantly higher than in terms of its economic or social impact.

• 51% rated 'environmental impact' as being of 'highest importance', compared to only 28% rating 'economic impact' as being of 'highest importance' and 21% rating 'social impact' as being of 'highest importance'.

The above finding suggests that perceptions of biosecurity are very one dimensional in terms of focus, with the broader implications and ramifications of biosecurity not being a top of mind consideration.

Q5: The following three areas have been identified as being why biosecurity is important to NSW. Please rank these in what you see to be their order of importance.....



Base (total General Population sample) n= 1149



Examining responses by key sub groups within the NSW general population:

By gender:

No significant differences were found.

By age:

- Those aged 18-29 rated importance to 'environmental impact' significantly higher, while those aged 70 plus rated it significantly lower than did the population at large.
- Those aged 30-39 rated importance to 'economic impact' significantly higher than did the population at large, and the importance to 'social impact' significantly lower.

For full tabulations of data for 'Q5 - Relative economic, environmental and social impact' refer to Appendix C: General Population – Analysis Tables.

4.2.3. Perceived importance to other issues facing NSW.

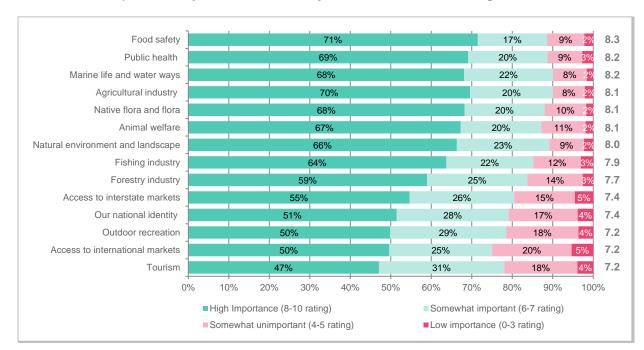
Despite the low level of association biosecurity with 'overall social impact', very high levels of association are had with two specific social factors, namely:

- 'Food safety' (71% rate as 'high importance').
- 'Public health' (69% rate as 'high importance').

Reflecting the strong association that exists between biosecurity and the environment at large, biosecurity (and its perceived importance) had high levels of association with a range of environmental factors.

- 'Agricultural industry' (70% rate as being of 'high importance');
- 'Native flora and flora' (68% rate as being of 'high importance');
- 'Marine life and water ways' (68% rate as being of 'high importance');
- 'Animal welfare' (67% rate as being of 'high importance');
- 'Natural environment and landscape' (66% rate as being of 'high importance');
- 'Fishing industry' (64% rate as being of 'high importance'); and
- 'Forestry industry' (59% rate as being of 'high importance').





Q6: And how important do you think biosecurity is to each of the following?

Base (total General Population sample) n= 1149

Examining responses by key sub groups within the NSW general population:

By gender:

 Males rated the importance of biosecurity as being significantly lower to each factor than did females.

By age:

 Younger age groups (especially those aged 18-39) tended to rate the importance of biosecurity as being lower to each factor than did older age groups (especially those aged 60 plus).

By region:

- Those located out of town tended to rate the importance of biosecurity as being higher to each factor than did the population at large.
- Those located in the Central Tablelands, North Coast, Riverina and Western regions tended to rate the importance of biosecurity as being higher across a range of factors than did the population at large.
- Those located in the South East region tended to rate the importance of biosecurity as being lower across a range of factors than did the population at large.

For full tabulations of data for 'Q6 - Perceived importance to other issues facing NSW' refer to Appendix C: General Population – Analysis Tables.



4.3. Biosecurity behaviours.

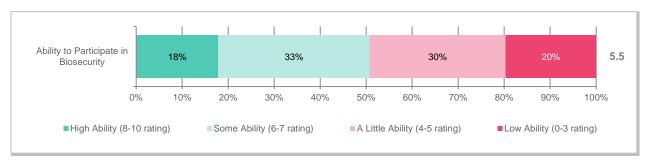
4.3.1. Perceived ability in relation to biosecurity.

Respondents were asked the extent to which they felt they had 'sufficient knowledge and ability to prevent, identify, manage or respond to any potential biosecurity issues encountered'.

- 18% rated their ability as 'high'.
- A further 33% rated their ability as 'some'.
- 50% rated their ability as 'little' (30%) to 'low' (20%).

These findings closely reflect the earlier proportions rating their understanding of what biosecurity is as being 'high' or 'low', and indicate that the lack of understanding and knowledge held is resulting in a corresponding lack of preparedness to act.

Q7: To what extent do you feel that you have sufficient knowledge and ability to prevent, identify, manage or respond any potential biosecurity issues you encounter?



Base (total General Population sample) n= 1149

Examining responses by key sub groups within the NSW general population:

By gender:

 Males rated the extent to which they had 'sufficient knowledge and ability to prevent, identify, manage or respond to any potential biosecurity issues encountered' significantly higher than did females.

By age:

 Those aged 18-39 rated the extent to which they had 'sufficient knowledge and ability to prevent, identify, manage or respond to any potential biosecurity issues encountered' significantly higher, while those aged 60-69 rated their knowledge and ability as significantly lower.

By region:

- Those located out of town rated the extent to which they had 'sufficient knowledge and ability to prevent, identify, manage or respond to any potential biosecurity issues encountered' significantly lower than did those in town.
- Those located in the Hunter, North West, Northern Tablelands and Riverina regions rated the extent to which they had 'sufficient knowledge and ability to prevent, identify, manage



or respond to any potential biosecurity issues encountered' significantly lower than did the population at large.

For full tabulations of data for 'Q7 - Perceived ability in relation to biosecurity' refer to Appendix C: General Population – Analysis Tables.

4.3.2. Current performance of biosecurity behaviours.

The meeting of quarantine requirements at the airport is the biosecurity behaviour that is most rigidly adhered to, with 81% of the general population stating that they either 'always' (65%) or 'usually' (16%) follow this requirement.

High levels of observance are also had in relation to behaviours aimed to target the spread of garden weeds within their own backyard:

- 77% mostly 'dispose of garden weeds only through council approved collections';
- 76% mostly 'keep garden weeds under control to ensure they don't spread into nearby parks or natural areas'; and
- Additionally only 17% tend to regularly 'purchase, grow or sell a plant that is classified as a weed'.

High levels of observance are also had in relation to behaviours aimed to mitigate the transfer of biosecurity matter:

- 66% mostly 'wash vehicle (car, 4WD, truck motorbike, pushbike, etc.), if has been off road'.
- 64% mostly 'dispose of aquarium fish and weeds appropriately'.
- 64% mostly 'wash camping equipment thoroughly after use'.
- 54% mostly 'thoroughly check, clean and dry boat before moving it to another waterway'.
- 53% mostly 'wash / clean shoes after bushwalking / visiting a farm'.
- 53% mostly 'check that no pests or weeds are trapped in the packaging of any goods that you buy'.
- 50% mostly 'promote Australia's biosecurity rules to overseas family before they come to visit'.
- Additionally only 18% tend to regularly 'make an online purchase of plants (including seeds) from overseas'.

However more proactive behaviours targeting the eradication of biosecurity threats are less frequently practised with only:

- 48% mostly 'reporting any unusual or strange animal or plant sightings to appropriate authority'.
- 31% 'belonging to a community group to control environmental pests or weeds'.



Q8: Which, if any of the following do you ever do?



Base (General Population excluding "Does not apply" responses) n= 395 to 1046

Examining responses by key sub groups within the NSW general population:

By gender:

 Females tended to be significantly less likely to regularly perform a range of desired biosecurity behaviours than were males; however they were significantly more likely to be vigilant about meeting airport quarantine requirements.

By age:

 Performance of behaviours by age was highly variable, with younger age groups more likely to regularly perform proactive behaviours such as belonging to community groups and reporting biosecurity concerns, while older age groups were more likely to be vigilant at the airport, not purchase weeds or make online purchases of seeds and perform desired behaviours relating to garden weed disposal.

For full tabulations of data for 'Q8 - Current performance of biosecurity behaviours' refer to Appendix C: General Population – Analysis Tables.

4.3.3. Impact of knowledge on likelihood to act.

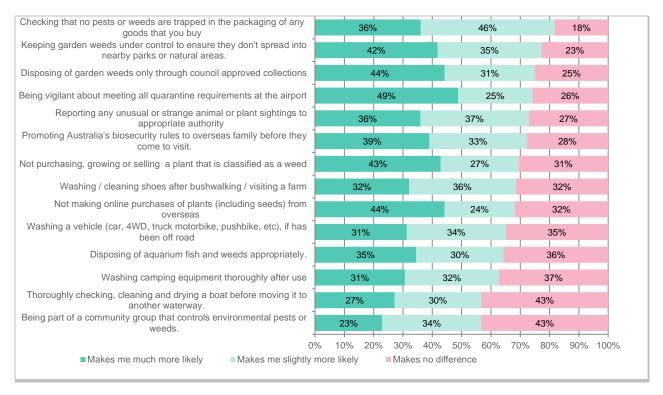
Once members of the general population participating within the survey were made aware that a range of activities could help protect biosecurity in NSW, there was generally uplift in intent to perform that behaviour moving forward, particularly around activities that related to weed control and online plant transactions.



The key area where increased knowledge that performing the desired activity would help to protect NSW's biosecurity did not result in increased likelihood to do so, was in relation to joining community groups (43% mentioned it 'makes no difference').

NB: High levels of 'makes no difference' were also recorded against behaviours such as
washing boats, camping equipment, vehicles etc. however this response was largely due to
the lack of need / opportunity to perform the activity as opposed to reluctance to do so.

Q9: Each of the below activities is a way that you, as an individual, can help protect the biosecurity of NSW. To what extent does knowing this impact your likelihood to do each of the following in the future (should the opportunity arise?)



Base (General Population excluding respondents where activity "Does not apply" for similar activity listed in Q8) n= 395 to 1046

Examining responses by key sub groups within the NSW general population:

By gender:

- Knowing the level of importance of an activity to biosecurity made females significantly more likely than males to take action in the future with regard to:
 - Checking that no pests or weeds are trapped in the packaging of any goods that you buy;
 - Not purchasing, growing or selling a plant that is classified as a weed;
 - Promoting Australia's biosecurity rules to overseas family before they come to visit;
 - Being vigilant about meeting all quarantine requirements at the airport.



By age:

 With regard to age, knowing the level of importance of an activity to biosecurity tended to make older age groups more likely to take action across nearly all desired behaviours. In comparison, the impact of such knowledge on increasing the likelihood to perform that behaviour was lower among younger age groups.

By region:

- Knowing the level of importance of an activity to biosecurity made those living out of town significantly more likely (than those who live in town) to take action in the future across a range of desired behaviours.
- The impact of knowing the level of importance of an activity to biosecurity tended to have a higher likelihood of driving intent to perform that behaviour among residents of the Murray, North Coast and Riverina regions.

For full tabulations of data for 'Q9 - Impact of knowledge on likelihood to act' refer to Appendix C: General Population – Analysis Tables.

4.4. Responsibility for biosecurity.

4.4.1. Where responsibility for biosecurity is seen to sit.

Perception as to where responsibility for biosecurity sits is predominantly centered on government, followed by primary producers and related industry groups.

Awareness that the general population and the individual do have some level of responsibility for biosecurity (53% and 54% respectively) is significantly below the perceived accountability government, primary producers and associated industry groups are tasked with.

67% see responsibility to be shared between government and industry versus 64% who see that responsibility is a shared responsibility between the government, industry and the general population.



NSW Department of Primary Industries 8.2 69% 19% 9% 3% 17% 10% 4% 8.1 Is a shared responsibility between government and industry 19% 10% 4% 8.1 64% A shared responsibility across government, industry and the general public 21% 8.1 67% 20% 8.0 Agricultural industry 66% 8.0 Fishing industry 19% 8.0 67% 18% Forestry industry Federal Government 21% 7.9 63% 11% 49 19% 7.9 Local Government / Council 22% 7.9 Local Land Services 25% 10% 4% 7.8 7.5 Environmental groups 25% 14% 59 7.5 Fishermen / recreational waterway users 25% 7.5 25% 15% 7.4 Bushwalkers 26% 7.3 Other industries / businesses (not primary producers or plant retailers) 26% 7.1 40% 20% 60% 80% 100% ■High Level (8-10 rating) ■Somewhat High Level (6-7 rating) ■Somewhat Low Level (4-5 rating) ■Low Level (0-3 rating)

Q10: To what extent do you believe that each of the following groups has responsibility for biosecurity in NSW?

Base (total General Population sample) n= 1149

Examining responses by key sub groups within the NSW general population:

By gender:

 Females tended to rate the overall level of responsibility for biosecurity as being significantly higher for each body than did males.

By age:

• Younger age groups tended to rate the overall level of responsibility for biosecurity as being significantly lower for each body than did older age groups.

By region:

- Those located out of town tended to rate the overall level of responsibility of most groups as being significantly higher than those living in town.
- Those located in the Central Tablelands, Murray, North Coast, North West, Riverina and Western regions tended to rate the overall level of responsibility for biosecurity as being significantly higher for most bodies, than did the population at large.

For full tabulations of data for 'Q10 - Where responsibility for biosecurity is seen to sit' refer to Appendix C: General Population – Analysis Tables.

4.4.2. Drivers of personal responsibility

Acceptance of personal responsibility for biosecurity is typically motivated by a sense that it is the 'right thing to do', as mentioned by one in four members of the general population (25%).

 The strength of this sentiment is stronger or weaker based on the individual's own level of belief in their personal level of responsibility for biosecurity.



14% cited that acceptance of personal responsibility was due to a sense of it being part of a broader societal responsibility (with this increasing to 21% among those who accept a high level of personal responsibility).

Among those who only accept a low level of personal responsibility, the key reason given was that an individual 'could only try their best' (14%). This suggests that there is a lack of belief in either knowledge of what should be being done, or that it is not felt that personal actions have an associated relevance or impact.

Q11: Why do you rate your own responsibility to biosecurity that way? Please type your response below

Reasons for Personal Responsibility for Biosecurity	Total Sample	High level of responsibility (8-10 rating)	Low level of responsibility (0-3 rating)
Base (n=)	(1149)	(674)	(56)
Personal responsibility/obligation/Right thing to do	25%	35% ↑	1% ↓
Everyone's responsibility/Important for everyone to help	14%	21% ↑	0% ↓
Try my best/Do everything I can	10%	8%	14%
Important to follow rules/Minimise Risk to Country/Keep country safe	5%	5%	0% ↓
Not very relevant to me/Not an issue or concern	5%	2% ↓	10%
Important to protect the environment	4%	4%	0% ↓
Can't control behaviour of others/nothing I can do	2%	1%	8%
It's the government's role	3%	4%	0% ↓
Lack awareness of issues/understanding	2%	2%	1%
Other	12%	11%	16%
No reason/Don't known	21%	9% ↓	50% ↑

For full tabulations of data for 'Q11 - Drivers of personal responsibility' refer to Appendix C: General Population – Analysis Tables.

4.5. Biosecurity management strategies

4.5.1. Priorities for future management of biosecurity

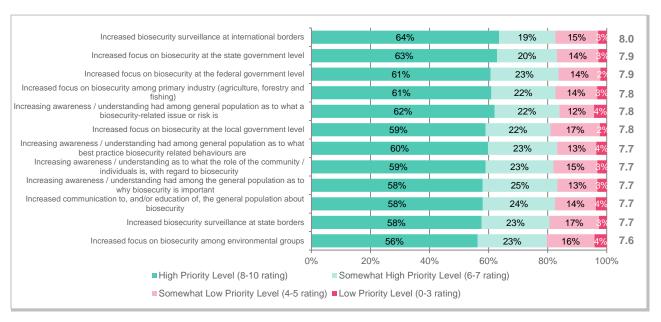
Each of the potential measures put forward as being ways that biosecurity management in NSW could be made more effective were seen to be either a 'high' or 'somewhat high' priority by more than four out of five members of the general population. This high level of overall support shows there is a strong appetite for an increased focus on biosecurity to be had.

 While there is little discrimination between the results for individual measures, directionally 'surveillance at international borders' is seen to have the highest level of priority, followed by increased levels of focus at both the federal and state government levels, as well as among primary industry.



 Relatively lower levels of prioritisation are attached to increasing the focus amongst environmental groups or at state borders (noting that three in five still rate these aspects as a 'high' priority).

Q12: The following have been identified as being possible ways that biosecurity management in NSW could be made more effective. Please indicate to what extent you see each of these being a priority moving forward



Base (total General Population sample) n= 1149

Examining responses by key sub groups within the NSW general population:

By gender:

- Females attached a higher level of relative importance to measures aimed at increasing awareness in general than they did to measures aimed at communicating specific information.
- Females tended to rate the importance of each measure as being significantly higher than did males.

By age:

 Older age groups tended to rate the importance of each measure as being significantly higher than did younger age groups.

By region:

- Those living out of town tended to rate the importance of each measure as being significantly higher than did those living in town.
- Those living in the Central Tablelands, Murray, North Coast, North West, Riverina and Western regions tended to rate the importance of measures as being significantly higher than did the population at large.

For full tabulations of data for 'Q12 - Priorities for future management of biosecurity' refer to Appendix C: General Population – Analysis Tables.



4.5.2. Personal appetite for information and/or targetted action

High levels of personal appetite for targetted action that would promote biosecurity in the future were evident for specific industry accreditation schemes, with:

- 70% expressing a positive desire (very or somewhat interested) to 'purchase plants that are industry certified as being biosecurity compliant'; and
- 67% expressing a positive desire (very or somewhat interested) to 'purchase grocery items (fruit, veg, dairy, meat, etc.) that are industry certified as being biosecurity compliant'.

However, lower levels of interest were apparent when such accreditation was suggested in more general terms, with only 58% expressing a positive desire (very or somewhat interested) to 'doing business with companies that have biosecurity plans in place'.

With regard to information needs:

• 65% expressed a positive desire (very or somewhat interested) to 'learn more about biosecurity, reflecting a definite appetite for information exists'.

With regard to favoured channels for the provision of such information:

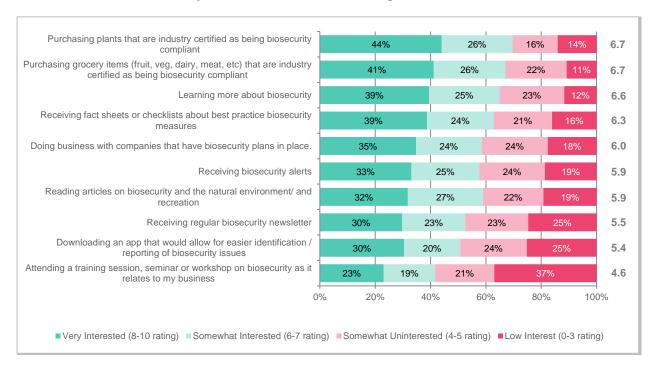
- 63% expressed a positive desire (very or somewhat interested) to 'receive fact sheets or checklists about best practice biosecurity measures'.
- 59% expressed a positive desire (very or somewhat interested) to 'read articles on biosecurity and the natural environment/ and recreation'.
- 58% expressed a positive desire (very or somewhat interested) to 'receive biosecurity alerts'.
- 53% expressed a positive desire (very or somewhat interested) to 'receive a regular biosecurity newsletter'.

However only:

- 51% expressed a positive desire (very or somewhat interested) to 'download an app that would allow for easier identification / reporting of biosecurity issues'.
- 42% expressed a positive desire (very or somewhat interested) to 'attend a training session, seminar or workshop on biosecurity as it relates to my business'.



Q13: How interested would you be in each of the following?



Base (total General Population sample) n= 1149

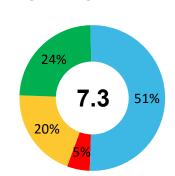
For full tabulations of data for 'Q13 - Personal appetite for information or targetted action' refer to Appendix C: General Population – Analysis Tables.

5. General Population: Summary tables

General Population: Total (n=1,149)

IMPORTANCE

TOP 5 DRIVERS OF IMPORTANCE



Food safety (8.3)

3

Public health (8.2)

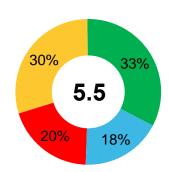
Marine life and water ways (8.2)

4 Agricultural industry (8.1)

Native flora and flora (8.1)

ABILITY TO ACT

TOP 5 BEHAVIOURS



Be vigilant about meeting all quarantine requirements at the airport (81%)

2 Dispose of garden weeds only through council approved collections (77%)

Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (76%)

Wash vehicle (car, 4WD, truck motorbike, pushbike, etc.), if has been off road (66%)

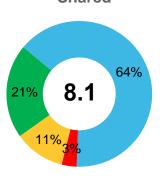
Disposing of aquarium fish and weeds appropriately (64%)

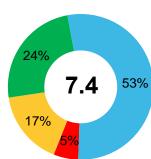
WHERE RESPONSIBILITY SEEN TO SIT

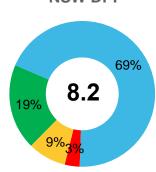
Shared

General population

NSW DPI







APPETITE FOR ACTION

Top 5 strategies to prioritise

Increased biosecurity surveillance at international borders (8.0)

Increased focus on biosecurity at the state government level (7.9)

Increased focus on biosecurity at the federal 3 government level (7.9)

> Increased focus on biosecurity among primary industry (agriculture, forestry and fishing) (7.8)

Increasing awareness / understanding had among general population as to what a biosecurity-related issue or risk is (7.8)

Uptake of initiatives

Purchasing plants that are industry certified as being biosecurity compliant (6.7)

Purchasing grocery items that are industry certified as 2 being biosecurity compliant (6.7)

3 Learning more about biosecurity (6.6)

Receiving fact sheets or checklists about best practice 4 biosecurity measures (6.3)

Doing business with companies that have biosecurity plans in place. (6.0)

4



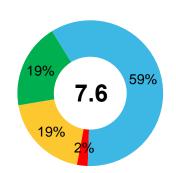




5.2. General Population by Region: Central Tablelands (n=75)

IMPORTANCE

TOP 5 DRIVERS OF IMPORTANCE



Agricultural industry (9.0)

2 Native flora and flora (8.6)

Fishing industry (8.5)

3

3

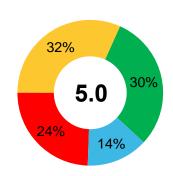
4

4 Marine life and water ways (8.5)

Natural environment and landscape (8.4)

ABILITY TO ACT

TOP 5 BEHAVIOURS



Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (87%)

Be vigilant about meeting all quarantine requirements at the airport (87%)

Dispose of garden weeds only through council approved collections (83%)

Disposing of aquarium fish and weeds appropriately (77%)

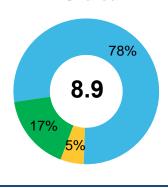
Wash camping equipment thoroughly after use (57%)

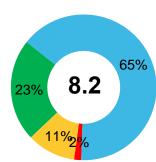
WHERE RESPONSIBILITY SEEN TO SIT

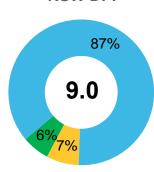


General population

NSW DPI







APPETITE FOR ACTION

Top 5 strategies to prioritise

Increased focus on biosecurity at the federal government level

Increased focus on biosecurity at the local government level

Increased focus on biosecurity at the state government level 3

Increasing awareness / understanding had among general population as to what a biosecurity-related issue or risk is (8.6)

Increasing awareness / understanding had among the general population as to why biosecurity is important (8.6)

Uptake of initiatives

Purchasing plants that are industry certified as being biosecurity compliant (7.6)

Purchasing grocery items (veg, meat, etc.) that are industry 2 certified as being biosecurity compliant (7.4)

3 Learning more about biosecurity (7.3)

Receiving fact sheets or checklists about best practice 4 biosecurity measures (7.0)

Doing business with companies that have biosecurity plans in place (6.4)

2

4

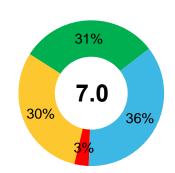




5.3. General Population by Region: Central West (n=80)

IMPORTANCE

TOP 5 DRIVERS OF IMPORTANCE



Agricultural industry (8.2)

2 Public health (8.1)

3

2

4

Food safety (8.1)

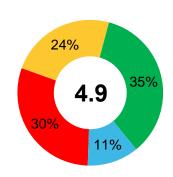
4

Native flora and flora (8.0)

Marine life and water ways (8.0)

ABILITY TO ACT

TOP 5 BEHAVIOURS



Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (86%)

Be vigilant about meeting all quarantine requirements at the airport (84%)

3 Disposing of aquarium fish and weeds appropriately (77%)

Dispose of garden weeds only through council approved collections (71%)

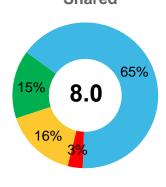
Wash camping equipment thoroughly after use (68%)

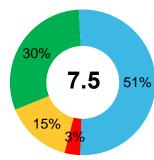
WHERE RESPONSIBILITY SEEN TO SIT

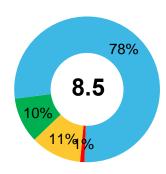
Shared

General population

NSW DPI







APPETITE FOR ACTION

Top 5 strategies to prioritise

Increased focus on biosecurity at the state government

Increased biosecurity surveillance at international 2 borders (8.3)

Increased focus on biosecurity at the federal 3 government level (8.2)

Increased focus on biosecurity among primary industry 4 (agriculture, forestry and fishing) (8.0)

Increased focus on biosecurity at the local government 5 level (8.0)

Uptake of initiatives

Purchasing plants that are industry certified as being biosecurity compliant (7.4)

Purchasing grocery items (veg, meat, etc.) that are 2 industry certified as being biosecurity compliant (7.4)

3 Learning more about biosecurity (7.0)

Receiving fact sheets or checklists about best practice 4 biosecurity measures (6.8)

Doing business with companies that have biosecurity plans in place (6.4)

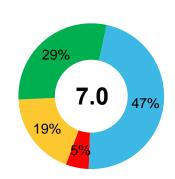




5.4. General Population by Region: Sydney/Greater Sydney (n=218)

IMPORTANCE

TOP 5 DRIVERS OF IMPORTANCE



Food safety (8.3)

Public health (8.2)

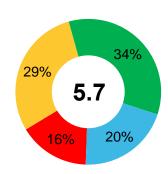
3 Marine life and water ways (8.2)

4 Animal welfare (8.1)

Native flora and flora (8.1)

ABILITY TO ACT

TOP 5 BEHAVIOURS



Be vigilant about meeting all quarantine requirements at the airport (79%)

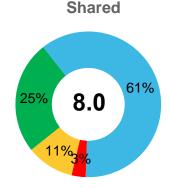
Dispose of garden weeds only through council approved collections (73%)

Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (72%)

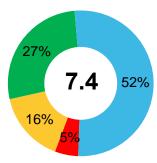
Wash vehicle (car, 4WD, truck motorbike, pushbike, etc.), if has been off road (67%)

Wash camping equipment thoroughly after use (64%)

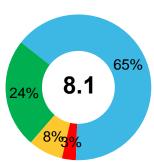
WHERE RESPONSIBILITY SEEN TO SIT



General population



NSW DPI



APPETITE FOR ACTION

Top 5 strategies to prioritise

Increased biosecurity surveillance at international borders (7.8)

Increased focus on biosecurity at the state government 2 level (7.8)

Increased focus on biosecurity at the federal government level (7.7)

> Increased focus on biosecurity among primary industry (agriculture, forestry and fishing) (7.7)

Increasing awareness / understanding had among general population as to what best practice biosecurity related behaviours are (7.7)

Uptake of initiatives

Purchasing plants that are industry certified as being biosecurity compliant (6.6)

Purchasing grocery items (veg, meat, etc.) that are 2 industry certified as being biosecurity compliant (6.6)

3 Learning more about biosecurity (6.5)

Receiving fact sheets or checklists about best practice 4 biosecurity measures (6.2)

Doing business with companies that have biosecurity plans in place (6.0)

4

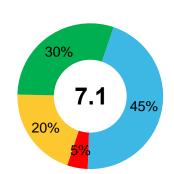




5.5. General Population by Region: Hunter (n=101)

IMPORTANCE

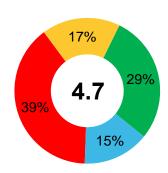
TOP 5 DRIVERS OF IMPORTANCE



- Food safety (8.2)
- Marine life and water ways (8.2)
- 3 Animal welfare (8.1)
- 4 Public health (8.0)
- Native flora and flora (8.0)

ABILITY TO ACT

TOP 5 BEHAVIOURS



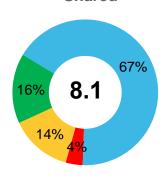
- Be vigilant about meeting all quarantine requirements at the airport
- Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (83%)
- Dispose of garden weeds only through council approved collections
- 4 Disposing of aquarium fish and weeds appropriately (65%)
- Wash vehicle (car, 4WD, truck motorbike, pushbike, etc.), if has been off road (63%)

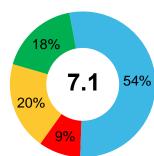
WHERE RESPONSIBILITY SEEN TO SIT

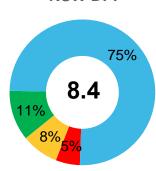
Shared



NSW DPI







APPETITE FOR ACTION

Top 5 strategies to prioritise

- Increased biosecurity surveillance at international borders (8.2)
- Increasing awareness / understanding had among general population as to what a biosecurity-related issue or risk is (8.0)
- Increased focus on biosecurity at the local government 3 level (8.0)
- Increased focus on biosecurity at the state government 4 level (8.0)
- Increased focus on biosecurity at the federal government level (8.0)

Uptake of initiatives

- Purchasing plants that are industry certified as being biosecurity compliant (6.4)
- Purchasing grocery items (veg, meat, etc.) that are 2 industry certified as being biosecurity compliant (6.3)
- 3 Learning more about biosecurity (6.2)
- Receiving fact sheets or checklists about best practice 4 biosecurity measures (6.1)
- Doing business with companies that have biosecurity plans in place (5.9)







5.6. General Population by Region: Murray (n=75)

3

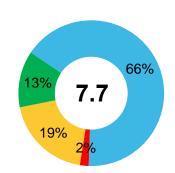
4

3

4

IMPORTANCE

TOP 5 DRIVERS OF IMPORTANCE



Agricultural industry (8.7)

2 Food safety (8.6)

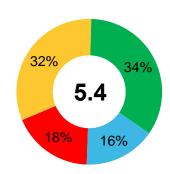
Public health (8.5)

Marine life and water ways (8.4)

Native flora and flora (8.3)

ABILITY TO ACT

TOP 5 BEHAVIOURS



Dispose of garden weeds only through council approved collections (88%)

Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (84%)

Be vigilant about meeting all quarantine requirements at the airport (79%)

Disposing of aquarium fish and weeds appropriately (77%)

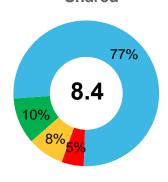
Wash camping equipment thoroughly after use (75%)

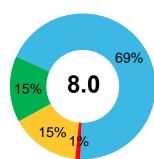
WHERE RESPONSIBILITY SEEN TO SIT

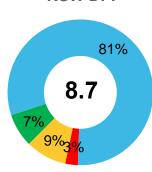
Shared

General population

NSW DPI







APPETITE FOR ACTION

Top 5 strategies to prioritise

Increased biosecurity surveillance at international borders (8.7)

Increased focus on biosecurity at the local government 2 level (8.6)

Increased focus on biosecurity at the federal government level (8.5)

Increased focus on biosecurity at the state government

Increased focus on biosecurity among primary industry (agriculture, forestry and fishing) (8.4)

Uptake of initiatives

Purchasing grocery items (veg, meat, etc.) that are industry certified as being biosecurity compliant (7.4)

Purchasing plants that are industry certified as being 2 biosecurity compliant (7.3)

Receiving fact sheets or checklists about best practice biosecurity measures (6.8)

4 Learning more about biosecurity (6.4)

Downloading an app that would allow for easier identification / reporting of biosecurity issues (6.0)

4





5.7. General Population by Region: North Coast (n=101)

3

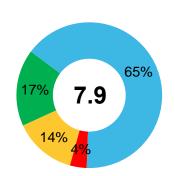
4

3

4

IMPORTANCE

TOP 5 DRIVERS OF IMPORTANCE



Animal welfare (8.7)

Marine life and water ways (8.7)

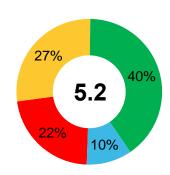
Native flora and flora (8.7)

Agricultural industry (8.6)

Public health (8.6)

ABILITY TO ACT

TOP 5 BEHAVIOURS



Be vigilant about meeting all quarantine requirements at the airport (91%)

Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (86%)

Dispose of garden weeds only through council approved collections (83%)

Disposing of aquarium fish and weeds appropriately (83%)

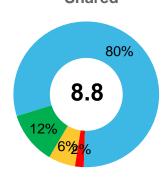
Wash camping equipment thoroughly after use (67%)

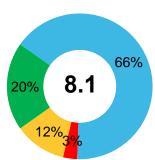
WHERE RESPONSIBILITY SEEN TO SIT

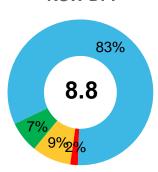
Shared

General population

NSW DPI







APPETITE FOR ACTION

Top 5 strategies to prioritise

Increased focus on biosecurity at the state government

- Increased focus on biosecurity at the federal 2 government level (8.8)
- Increased focus on biosecurity at the local government
- Increased biosecurity surveillance at international 4 borders (8.7)
- Increasing awareness / understanding had among general population as to what a biosecurity-related issue or risk is (8.6)

Uptake of initiatives

- Purchasing grocery items (veg, meat, etc.) that are industry certified as being biosecurity compliant (7.6)
- Purchasing plants that are industry certified as being 2 biosecurity compliant (7.6)
- 3 Learning more about biosecurity (7.2)
- Receiving fact sheets or checklists about best practice 4 biosecurity measures (7.1)
- Receiving biosecurity alerts (6.5)





General Population by Region: North West (n=78)

3

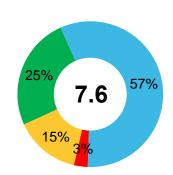
4

3

4

IMPORTANCE

TOP 5 DRIVERS OF IMPORTANCE



Agricultural industry (8.6)

2 Fishing industry (8.6)

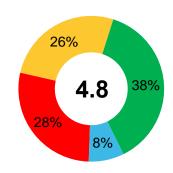
Food safety (8.6)

Public health (8.5)

Marine life and water ways (8.5)

ABILITY TO ACT

TOP 5 BEHAVIOURS



Be vigilant about meeting all quarantine requirements at the airport (79%)

Dispose of garden weeds only through council approved collections (70%)

Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (66%)

Disposing of aquarium fish and weeds appropriately (65%)

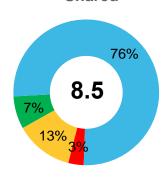
Wash camping equipment thoroughly after use (59%)

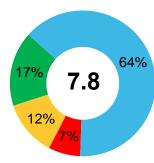
WHERE RESPONSIBILITY SEEN TO SIT

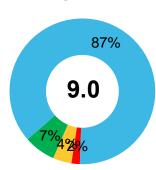
Shared

General population

NSW DPI







APPETITE FOR ACTION

Top 5 strategies to prioritise

Increased focus on biosecurity at the state government

Increased focus on biosecurity at the federal 2 government level (8.4)

Increased biosecurity surveillance at international borders (8.4)

Increased focus on biosecurity among primary industry (agriculture, forestry and fishing) (8.4)

Increasing awareness / understanding had among general population as to what a biosecurity-related issue or risk is (8.3)

Uptake of initiatives

Purchasing grocery items (veg, meat, etc.) that are industry certified as being biosecurity compliant (6.9)

2 Learning more about biosecurity (6.8)

Purchasing plants that are industry certified as being biosecurity compliant (6.6)

Receiving fact sheets or checklists about best practice 4 biosecurity measures (6.3)

Reading articles on biosecurity and the natural environment/ and recreation (5.9)

4



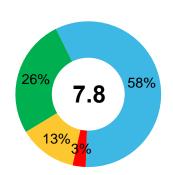




5.9. General Population by Region: Northern Tablelands (n=80)

IMPORTANCE

TOP 5 DRIVERS OF IMPORTANCE



Agricultural industry (8.7)

2 Marine life and water ways (8.7)

Public health (8.6)

4

3

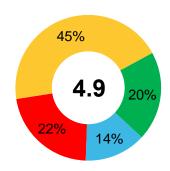
4

Native flora and flora (8.5)

Food safety (8.4)

ABILITY TO ACT

TOP 5 BEHAVIOURS



Be vigilant about meeting all quarantine requirements at the airport (84%)

Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (78%)

Disposing of aquarium fish and weeds appropriately (77%)

Dispose of garden weeds only through council approved collections (76%)

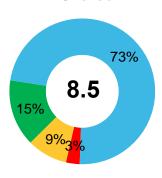
Wash camping equipment thoroughly after use (63%)

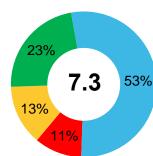
WHERE RESPONSIBILITY SEEN TO SIT

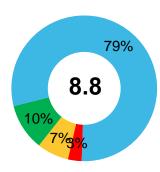


General population

NSW DPI







APPETITE FOR ACTION

Top 5 strategies to prioritise

Increased biosecurity surveillance at international borders (8.4)

Increased focus on biosecurity at the federal 2 government level (8.3)

Increased focus on biosecurity at the state government

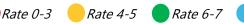
Increasing awareness / understanding had among general population as to what a biosecurity-related issue or risk is (8.2)

Increased focus on biosecurity among primary industry (agriculture, forestry and fishing) (8.2)

Uptake of initiatives

- Purchasing plants that are industry certified as being biosecurity compliant (7.2)
- Purchasing grocery items (veg, meat, etc.) that are 2 industry certified as being biosecurity compliant (7.1)
- 3 Learning more about biosecurity (6.6)
- Receiving fact sheets or checklists about best practice 4 biosecurity measures (6.4)
- Doing business with companies that have biosecurity plans in place (6.3)







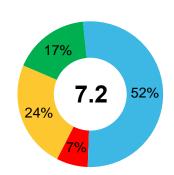


5.10. General Population by Region: Riverina (n=143)

4

IMPORTANCE

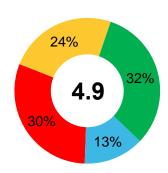
TOP 5 DRIVERS OF IMPORTANCE



- Agricultural industry (8.5)
- Marine life and water ways (8.5)
- 3 Animal welfare (8.5)
- 4 Food safety (8.4)
- Native flora and flora (8.3)

ABILITY TO ACT

TOP 5 BEHAVIOURS



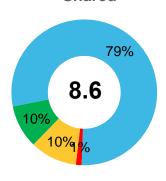
- Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (88%)
- Dispose of garden weeds only through council approved collections (88%)
- 3 Be vigilant about meeting all quarantine requirements at the airport (83%)
 - Disposing of aquarium fish and weeds appropriately (80%)
 - Thoroughly check, clean and dry boat before moving it to another waterway

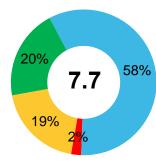
WHERE RESPONSIBILITY SEEN TO SIT

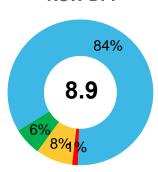
Shared



NSW DPI







APPETITE FOR ACTION

Top 5 strategies to prioritise

- Increased biosecurity surveillance at international borders (8.5)
- Increased focus on biosecurity at the federal 2 government level (8.3)
- Increased focus on biosecurity at the state government
- Increased focus on biosecurity among primary industry 4 (agriculture, forestry and fishing) (8.2)
- Increasing awareness / understanding had among the general population as to why biosecurity is important (8.2)

Uptake of initiatives

- Purchasing grocery items (veg, meat, etc.) that are industry certified as being biosecurity compliant (7.3)
- Purchasing plants that are industry certified as being 2 biosecurity compliant (7.2)
- 3 Learning more about biosecurity (6.8)
- Receiving fact sheets or checklists about best practice 4 biosecurity measures (6.5)
- Doing business with companies that have biosecurity plans in place (6.4)







5.11. General Population by Region: South East (n=123)

3

4

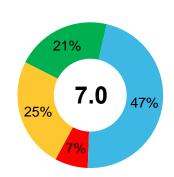
2

3

4

IMPORTANCE

TOP 5 DRIVERS OF IMPORTANCE



Native flora and flora (7.9)

Food safety (7.9)

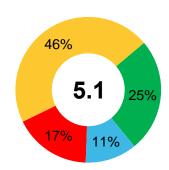
Agricultural industry (7.8)

Natural environment and landscape (7.8)

Marine life and water ways (7.6)

ABILITY TO ACT

TOP 5 BEHAVIOURS



Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (88%)

Dispose of garden weeds only through council approved collections (88%)

Be vigilant about meeting all quarantine requirements at the airport (87%)

Disposing of aquarium fish and weeds appropriately (82%)

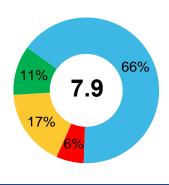
Wash camping equipment thoroughly after use (72%)

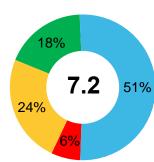
WHERE RESPONSIBILITY SEEN TO SIT

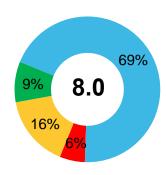
Shared

General population

NSW DPI







APPETITE FOR ACTION

Top 5 strategies to prioritise

Increased focus on biosecurity at the federal government level (7.9)

Increased biosecurity surveillance at international 2 borders (7.8)

Increased focus on biosecurity at the state government level (7.8)

Increased focus on biosecurity among primary industry 4 (agriculture, forestry and fishing) (7.6)

Increasing awareness / understanding had among general population as to what a biosecurity-related issue or risk is (7.6)

Uptake of initiatives

Purchasing grocery items (veg, meat, etc.) that are industry certified as being biosecurity compliant (6.8)

2 Learning more about biosecurity (6.6)

Purchasing plants that are industry certified as being biosecurity compliant (6.5)

Receiving fact sheets or checklists about best practice 4 biosecurity measures (6.3)

Reading articles on biosecurity and the natural environment/ and recreation (5.9)





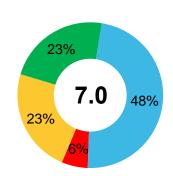
5.12. General Population by Region: Western (n=75)

2

3

IMPORTANCE

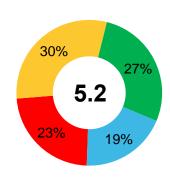
TOP 5 DRIVERS OF IMPORTANCE



- Agricultural industry (8.9)
 - Public health (8.7)
 - Native flora and flora (8.7)
- 4 Fishing industry (8.7)
 - Food safety (8.7)

ABILITY TO ACT

TOP 5 BEHAVIOURS

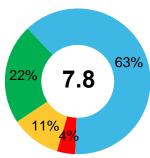


- Be vigilant about meeting all quarantine requirements at the airport (92%)
- Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (88%)
- 3 Dispose of garden weeds only through council approved collections (85%)
- 4 Disposing of aquarium fish and weeds appropriately (79%)
 - Wash vehicle (car, 4WD, truck motorbike, pushbike, etc.), if has been off road

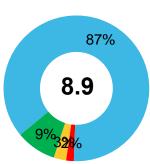
WHERE RESPONSIBILITY SEEN TO SIT

Shared 84% 8.8

General population



NSW DPI



APPETITE FOR ACTION

Top 5 strategies to prioritise

- Increased focus on biosecurity at the local government
- Increased biosecurity surveillance at international 2 borders (8.6)
- Increased focus on biosecurity among primary industry (agriculture, forestry and fishing) (8.6)
- Increased focus on biosecurity at the state government 4 level (8.6)
- Increasing awareness / understanding as to what the role of the community / individuals is, with regard to biosecurity (8.5)

Uptake of initiatives

- Purchasing grocery items (veg, meat, etc.) that are industry certified as being biosecurity compliant (7.6)
- Purchasing plants that are industry certified as being biosecurity compliant (7.3)
- Receiving fact sheets or checklists about best practice 3 biosecurity measures (6.2)
- 4 Learning more about biosecurity (6.2)
- Doing business with companies that have biosecurity plans in place. (5.8)





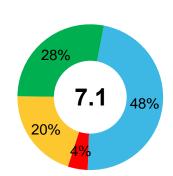




5.13. By Location: In-Town (n=909)

IMPORTANCE

TOP 5 DRIVERS OF IMPORTANCE



Food safety (8.2)

4

2 Public health (8.1)

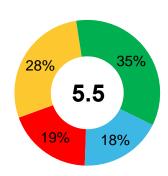
3 Marine life and water ways (8.1)

Agricultural industry (8.0)

Native flora and flora (8.0)

ABILITY TO ACT

TOP 5 BEHAVIOURS



Be vigilant about meeting all quarantine requirements at the airport (79%)

Dispose of garden weeds only through council approved collections (75%)

Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (74%)

Wash vehicle (car, 4WD, truck motorbike, pushbike, etc.), if has been off road (67%)

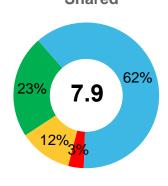
Wash camping equipment thoroughly after use (63%)

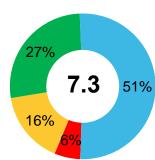
WHERE RESPONSIBILITY SEEN TO SIT

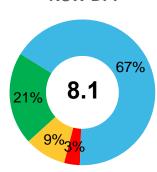
Shared

General population

NSW DPI







APPETITE FOR ACTION

Top 5 strategies to prioritise

Increased biosecurity surveillance at international borders (7.8)

Increased focus on biosecurity at the state government 2 level (7.8)

Increased focus on biosecurity at the federal 3 government level (7.8)

Increased focus on biosecurity among primary industry (agriculture, forestry and fishing) (7.7)

Increased focus on biosecurity at the local government 5 level (7.7)

Uptake of initiatives

Purchasing grocery items (veg, meat, etc.) that are industry certified as being biosecurity compliant (6.7)

Purchasing plants that are industry certified as being 2 biosecurity compliant (6.6)

3 Learning more about biosecurity (6.6)

Receiving fact sheets or checklists about best practice 4 biosecurity measures (6.3)

Doing business with companies that have biosecurity plans in place. (6.1)

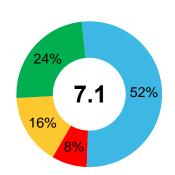




5.14. By Location: Out of Town (n=240)

IMPORTANCE

TOP 5 DRIVERS OF IMPORTANCE



Food safety (8.7)

2 Marine life and water ways (8.6)

3 Animal welfare (8.6)

4

3

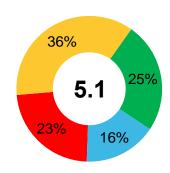
4

Native flora and flora (8.6)

Agricultural industry (8.6)

ABILITY TO ACT

TOP 5 BEHAVIOURS



Be vigilant about meeting all quarantine requirements at the airport (88%)

Keep garden weeds under control to ensure they don't spread into nearby parks or natural areas (86%)

Dispose of garden weeds only through council approved collections (82%)

Disposing of aquarium fish and weeds appropriately (78%)

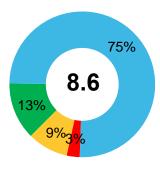
Wash camping equipment thoroughly after use (69%)

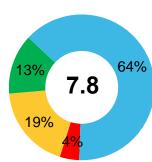
WHERE RESPONSIBILITY SEEN TO SIT

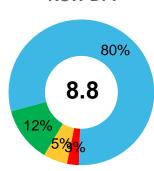


General population

NSW DPI







APPETITE FOR ACTION

Top 5 strategies to prioritise

Increased biosecurity surveillance at international borders (8.5)

Increasing awareness / understanding had among general 2 population as to what best practice biosecurity related behaviours are (8.5)

Increasing awareness / understanding had among general population as to what a biosecurity-related issue or risk is (8.5)

Increased focus on biosecurity among primary industry (agriculture, forestry and fishing) (8.4)

Increased focus on biosecurity at the federal government level

Uptake of initiatives

Purchasing plants that are industry certified as being biosecurity compliant (6.8)

Purchasing grocery items (veg, meat, etc.) that are industry 2 certified as being biosecurity compliant (6.6)

Receiving fact sheets or checklists about best practice 3 biosecurity measures (6.4)

4 Learning more about biosecurity (6.3)

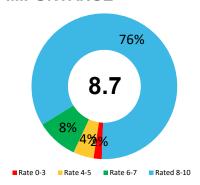
Receiving biosecurity alerts (5.9)





6. Primary Producers: Executive Summary.

IMPORTANCE



- The importance of biosecurity is perceived to be lower than 'ensuring business sustainability', 'preventing or controlling the spread of diseases', 'pests and weeds through plants and livestock' and 'adverse weather conditions'.
- No significant differences in the perceived level of importance of biosecurity on the basis of industry, farm size or region.

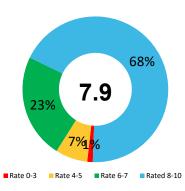
KEY DRIVERS

- 1 Ensuring sustainability of business (9.0)
- Protection of livelihood / income (9.0)
- 3 Maximizing production/yield (8.8)
- 4 Maximising quality of goods / process achieved (8.7)
 - Reduced incursions from diseases, pests, weeds (8.7)
- Drivers of behaviour tend to reflect the specific focus of the primary production industry, with those involved in livestock are more likely to cite ensuring animal welfare as a driver, while those involved in horticulture are less likely to cite this.
- Primary producers from farms sized >1000ha rate animal welfare as a stronger driver of behaviour than those from farms sized 0-99ha.
- Those from the Western region rate protection of livelihood / income as a key driver, while those from the Central Tablelands identify concerns around legal requirements / fines as a strong driver.

KEY BARRIERS

- 1 Is irrelevant to my operation (4.5)
- 2 Is too costly to do (4.0)
- Am too busy, don't have the time (3.6)
- Do not know what best practice measures are (3.6)
- Do not know enough about the risks and what can do about them (3.6)
- Primary producers from farms sized 0-99ha are significantly less likely to cite 'not knowing what best practice measures' as being a barrier.
- Those from the South East are more likely to cite 'irrelevance to my operation' as being a barrier. Those from the Murray are more likely to cite 'cost', 'risk not being worth the effort', 'lack of knowledge of what best practice behaviours are' and 'not knowing enough about the risks as being barriers'.
- Primary producers with low levels of farm income are more likely to cite 'time', 'costs' and 'risk not worth the effort' as being key barriers.

ABILITY TO ACT



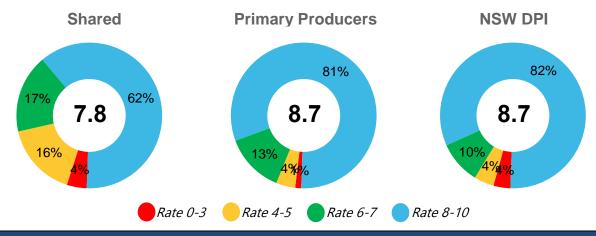
- Primary producers are more confident in being able to manage and respond to biosecurity issues, than identify or prevent such issues.
- Those with farms sized 0-99ha rate their ability to prevent issues as high. Primary producers located in the Central Tablelands region rate their overall ability in relation to biosecurity and their level of ability to identify prevent or identify such issues as being low.



TOP 5 BEHAVIOURS

- Take steps to eradicate known disease, weeds or pests (99%)
- Regularly monitor plants and/or livestock for disease, weeds or pests (98%)
- Investigate and/or report any instances or sightings of unusual disease, weeds or pests (93%)
- Ensure feed / grain / plant matter stored in optimal environment (89%)
- Routinely consult with experts or advisors such as vets, agronomists, etc. (85%)
- The majority of primary producers are implementing numerous biosecurity related practices, but as was found in the qualitative stage, they do not necessarily classify them as biosecurity measures (they are more seen as good farming practices).
- Less than half of all primary producers (47%) have a biosecurity plan in place and even fewer (32%) have a cash reserve to deal with an emergency biosecurity issue.

WHERE RESPONSIBILITY SEEN TO SIT



- Primary producers involved in livestock are less likely to see responsibility as sitting with peak body groups.
- Primary producers from farms sized 100-999ha are more likely to see responsibility as sitting with local government / council.
- Primary producers from the Central West are more likely to see responsibility as sitting with local government / council. Primary producers from the Hunter are more likely to see responsibility as being a shared responsibility between government and industry.
- Primary producers are least likely to nominate the general public as being responsible for biosecurity.

APPETITE FOR ACTION: Top 5 strategies to prioritise

- Increased biosecurity surveillance at international borders (9.0)
- 2 Increased govt. support to primary industry in managing biosecurity (8.9)
- Greater education of best practice biosecurity behaviours (8.6)
- Increasing agribusinesses awareness / understanding of biosecurity (8.6)
- Increasing gen. population awareness / understanding of biosecurity (8.1)
- Primary producers are most likely to see biosecurity surveillance at international borders as a high priority, as mentioned by 86%. They are least likely to see the equivalent surveillance at a state level as being a priority (only 66% see this as a high priority).
- There is also a call for increased government resources to support industry and greater education around best practices in biosecurity.

APPETITE FOR ACTION: Uptake of initiatives

1 Receiving biosecurity alerts (8.3)
2 Fact sheets about pest and disease types incl. symptoms and prevalence (7.9)
3 Fact sheets or checklists about best practice biosecurity measures (7.1)
4 Learning more about biosecurity in general (7.0)

5

Industry certification for biosecurity

compliant produce / livestock (7.0)

- Primary producers are most interested in receiving biosecurity alerts, with 79% having a high level of interest in this (mean score 8.3).
- There is also a high level of support for receiving fact sheets, particularly about the symptoms and prevalence of pests and diseases, but also for checklists about best practices.
- Interest is mixed however in relation to having an app for biosecurity identification or for attending training sessions on biosecurity risks.

APPETITE FOR ACTION: Desired communications

1	Via expert advisors such as agronomists or vets (8.2)
2	Via Local Land Services (7.4)
3	From relevant industry peak bodies (7.3)
4	Info. sessions hosted by local agribusinesses (6.7)
5	Mainstream media (TV, radio, newspapers) (6.3)

- Expert advisors are clearly the preferred means of receiving information and advice about biosecurity.
 There is also a high level of interest in receiving information via Local Land Services or relevant peak bodies.
- Only minimal interest is had in social media as a platform for receiving biosecurity information.
- Suggestions of using plant retailers / nurseries or community newspapers were also not as well received as other channels.

7. Primary Producers: Detailed Findings

7.1. Understanding of 'biosecurity.'

7.1.1. Understanding of what the term 'biosecurity' means.

Primary producers were asked to provide detail, (via a free text response), as to what they understand the term' biosecurity' to mean.

Primary producers have a very broad understanding of what 'biosecurity' means. They are most likely to describe it as the 'prevention or control of the spread of diseases' (as mentioned by every second primary producer -49%).

• Those who view biosecurity as more important are particularly likely to define it this way.

Primary producers also define biosecurity as relating to 'protecting plants / animals' or 'the prevention and control of pests'.

13% of primary producers could not provide a response when asked what the term 'biosecurity' means.

Q2: What do you understand to be meant by the term biosecurity?

Biosecurity understanding	Total Sample		
Base (n=)	(400)		
Prevention/spread of diseases	49%		
Protect/security of plants/animals	26%		
Prevent/Control Pests	20%		
Environment/Land Protection/Security	9%		
Product Protection/safety	8%		
Border Control/Protection/Quarantine	4%		
Chemical Hazards/Spays	4%		
Other	6%		
Don't Know	13%		

Base (total primary producer sample) n= 400

Examining responses against key sub groups within NSW primary producers:

By industry:

 Primary producers involved in Horticulture are more likely to define biosecurity as relating to the 'prevention and control of pests' and less likely to define it in terms of 'protection of plants and animals'.

By farm size:

No key differences in how biosecurity is defined apparent based on farm size.

By region:



 Those from the Hunter Region are more likely to define it in terms of 'preventing the spread of diseases', while those from the Murray region are less likely to define it in this way.

For full tabulations of data for 'Q2: Understanding as to what term 'biosecurity' means' refer to Appendix E: Primary Producers – Analysis Tables.

7.1.2. Rating of definition quality.

During the survey, primary producers were also asked to rate the quality of a range of listed biosecurity definitions.

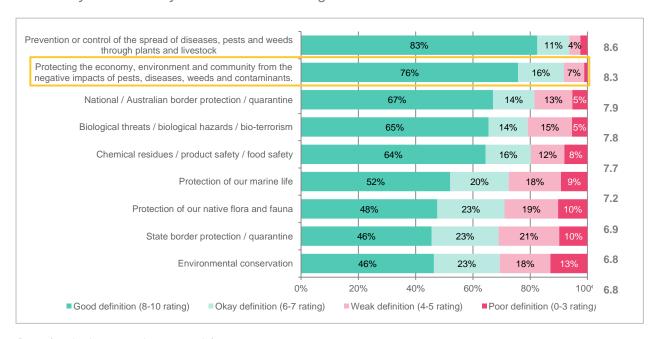
Within this list, the definition of biosecurity currently being used by NSW DPI was included; namely 'protecting the economy, environment and community from the negative impacts of pests, diseases, weeds and contaminants', with 76% rating this definition as 'good'.

The highest assessment as to quality of definition however was received for 'prevention or control of the spread of diseases, pests and weeds through plants and livestock'; 83% of the population rated this as being a good definition.

The term is also widely associated with national border protection and quarantine; however fewer primary producers define biosecurity in terms of state boarder protection.

Primary producers are least likely to define biosecurity in terms of environmental conservation.

Q3: I am now going to read you a list of statements that others have made to define what they believe biosecurity to be. To what extent do you feel each of these is a good definition of what biosecurity is based on your own understanding?



Base (total primary producer sample) n= 400



Examining responses against key sub groups within NSW primary producers:

By industry:

- Primary producers involved in livestock are less likely to rate the definition 'protecting
 the economy, environment and community from the negative impacts of pests, diseases,
 weeds and contaminants' as good.
- Those involved in cropping are less likely to rate the definition 'prevention or control of the spread of diseases, pests and weeds through plants and livestock' as good.
- Those involved in horticulture are more likely to rate the definition 'environmental conservation' as good.

By farm size:

- Those primary producers with farm sizes 100-999ha are more likely to rate the following definitions of biosecurity as good:
 - 'State border protection / quarantine'.
 - 'Prevention or control of the spread of diseases, pests and weeds through plants and livestock'.
 - 'Biological threats / hazards'.
 - 'Chemical residues / product safety / food safety'.
 - 'Environmental conservation'.
- Those with farm sizes of >1000ha are less likely to rate the following definitions of biosecurity as good:
 - 'State border protection / quarantine'.
 - 'Prevention or control of the spread of diseases, pests and weeds through plants and livestock'.

By region:

- Those primary producers located in the Sydney region are more likely to rate the definition 'prevention or control of the spread of diseases, pests and weeds through plants and livestock' as good, and those in the North West region are less likely.
- Those primary producers located in the South East region more likely to rate the definition 'protection of our marine life' as good.
- Those primary producers located in the Riverina region are more likely to rate the following definitions as good:
 - 'Biological threats / hazards'.
 - 'Environmental conservation'.

For full tabulations of data for 'Q3 – Rating of definition quality' refer to Appendix E: Primary Producers – Analysis Tables.



7.2. Perceived importance of biosecurity.

7.2.1. Relative importance versus other issues facing NSW.

Qualitatively, when asked what are the important issues facing NSW primary producers, no specific mention of biosecurity was made. Instead areas typically cited as being of key importance included: adverse weather (drought, floods, bushfires, and storms), access to markets, price at market, government regulations, land conservation and management, animal welfare and farm succession.

Additionally, when specifically prompted as to where biosecurity sits within such issues, it was stated that biosecurity was not something they tend to think about or see as a key consideration or concern, with the term itself widely viewed as 'jargon', 'government speak' or 'legalese.'

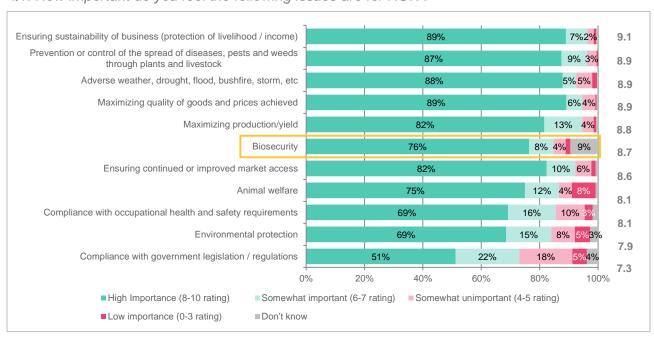
Quantitatively a similar result was found, with primary producers rating the most important issue they face as being 'ensuring sustainability of their business' (89%), followed by 'preventing or controlling the spread of diseases, pests and weeds through plants and livestock' (87%) and 'adverse weather conditions' (88%).

By way of contrast, only 76% of primary producers specifically rated biosecurity as being an issue of 'high importance' to NSW, with nine per cent responding with *don't know*, which is significantly higher than for any other issue asked about.

These results serve to reinforce the qualitative insight that biosecurity is not seen as a key consideration or concern, and that the term itself is not automatically associated with disease control and/or integral to ongoing business sustainability.

Compliance related issues have a relatively lower priority, particularly compliance with government legislation, with only half the primary producers placing high importance on this issue.





Base (total primary producer sample) n= 400



Examining responses against key sub groups within NSW primary producers:

By industry:

 No significant differences in the perceived level of importance of biosecurity on the basis of primary producer industry.

By farm size:

 No significant differences in the perceived level of importance of biosecurity on the basis of farm size.

By region:

 No significant differences in the perceived level of importance of biosecurity on the basis of region.

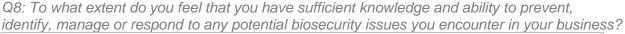
For full tabulations of data for 'Q1 – Relative importance relative to other issues facing NSW' refer to Appendix E: Primary Producers – Analysis Tables.

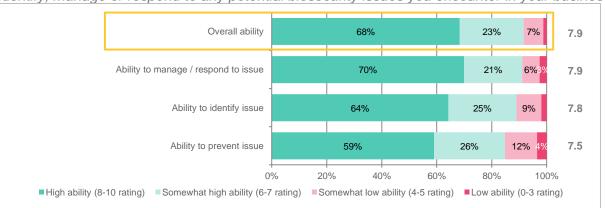
7.3. Biosecurity behaviours.

7.3.1. Perceived ability in relation to biosecurity.

At an overall level the majority of primary producers feel they have a high to somewhat high knowledge and ability to prevent, identify, manage or respond to any potential biosecurity issues encountered in their business; with 68% claiming they have a high ability to do so.

Primary producers are more confident in being able to manage and respond to biosecurity issues, than to identify or prevent such issues.





Base (total primary producer sample) n= 400

Examining responses against key sub groups within NSW primary producers:

By industry:

 No significant differences in the overall ability had in relation to biosecurity, or in the level of ability to prevent, identify, manage or respond to such issues are had on the basis of primary producer industry.



By farm size:

 No significant differences in the overall ability had in relation to biosecurity, or in the level of ability to identify manage or respond to such issues are had on the basis of farm size. However those on farms sized 0-99ha rate their ability to prevent such issues as being higher.

By region:

 Primary producers located in the Central Tablelands region rate their overall ability in relation to biosecurity and their level of ability to identify prevent or identify such issues as being low.

For full tabulations of data for 'Q8 – Perceived ability in relation to biosecurity' refer to Appendix E: Primary Producers – Analysis Tables.

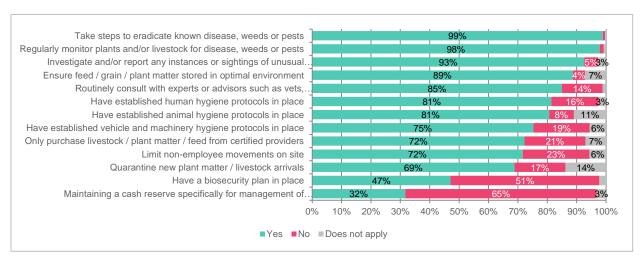
7.3.2. Current performance of biosecurity behaviours.

The majority of primary producers are implementing numerous biosecurity related practices, but as was found in the qualitative stage, they do not necessarily classify them as biosecurity measures (they are more seen as good farming practices).

• This is supported by the finding that less than half (47%) believe they have a biosecurity plan in place and even fewer (32%) have a cash reserve to deal with an emergency biosecurity issue.

Nearly all primary producers 'regularly monitor and eradicate diseases, weeds and pests', as mentioned by 98% or more. There is also widespread 'investigating and reporting of sightings of unusual diseases, weeds and pests' occurring by primary producers.





Base (total primary producer sample) n=400



When given an opportunity to list other biosecurity practices or behaviours undertaken by primary producers, a variety of other measures are mentioned, as outlined below.

Q5: What, if any, other biosecurity practices or behaviour do you have in place or follow?

Additional biosecurity practices or behaviours of primary producers

- Chemicals stored properly
- Fencing / control what comes onto property
- Follow rules / directions of industry bodies
- Have quality assurance hazard analysis critical control point
- Keep up to date with threats / outbreaks
- Organic certification
- Quarantine any suspect animals
- Minimise use of chemicals
- Vaccinating animals
- Vigilance / always looking out for potential risks

Base (total primary producer sample) n= 400

Examining responses against key sub groups within NSW primary producers:

By industry:

Those primary producers involved in cropping are more likely to 'ensure that feed / grain
is stored in an optimal environment', and those involved in livestock are more likely to
have 'animal hygiene protocols in place'.

By farm size:

• Larger farms are more likely to 'ensure that feed / grain is stored in an optimal environment'.

By region:

- Primary producers located in the Central West are more likely to 'quarantine new plant matter / livestock'.
- Those from the North Coast are more likely to 'only purchase from certified providers'.
- Those from the Murray are more likely to 'routinely consult with expert advisors'.
- Those from the North West are less likely to 'have a biosecurity plan in place'.

For full tabulations of data for 'Q4 – Current performance of biosecurity behaviours' refer to Appendix E: Primary Producers – Analysis Tables.



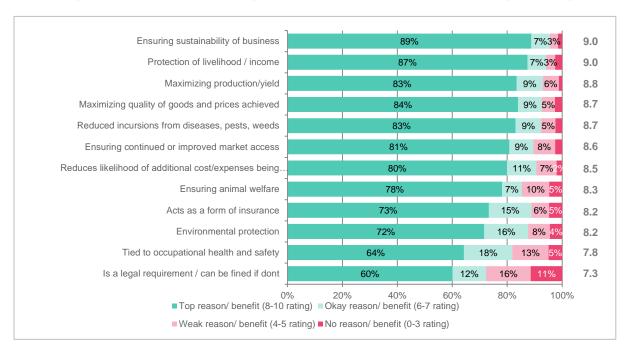
7.3.3. Perceived benefits of biosecurity measures.

Quantitatively the key motivation for undertaking biosecurity practices was found to be a desire to 'ensure business sustainability' and 'protection of livelihood', with 89% and 87% (respectively) mentioning these benefits. This is consistent with the high level of importance placed on this issue.

Primary producers also recognise the benefit of biosecurity practices in 'maximising their production and the quality of their produce'.

Compliance requirements are least likely to be seen as a reason to undertake biosecurity measures.

Q6: To what extent do you consider each of the following to be a reason why you practice biosecurity measures, or is a benefit you receive as a result of the biosecurity actions you take?



Base (total primary producer sample) n= 400

Examining responses against key sub groups within NSW primary producers:

By industry – drivers tend to reflect the specific focus within that industry:

- Primary producers involved in livestock are more likely to cite ensuring animal welfare as a driver, and less likely to cite maximizing production to yield.
- Those involved in horticulture are less likely to cite ensuring animal welfare as a driver of biosecurity practices.

By farm size:

• Primary producers from farms sized >1000ha are more likely to cite ensuring animal welfare as a driver of behaviour, while those from farms sized 0-99ha are less likely.

By region:

 Those from the Western region are more likely to cite protection of livelihood / income as driving biosecurity behaviours.



• Those from the Central Tablelands are more likely to cite concerns around behaviours being legal requirements as motivating their behaviour.

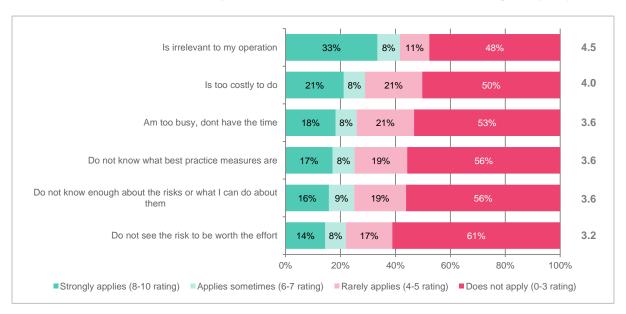
For full tabulations of data for 'Q6 – Drivers of performing biosecurity behaviours' refer to Appendix E: Primary Producers – Analysis Tables.

7.3.4. Barriers to following best practices in biosecurity.

Quantitatively the key barrier to following best practice biosecurity behaviours related to perceptions of 'relevance', with a third saying this strongly applies to them. 'Cost' is also a concern for some primary producers, as is the 'lack of awareness around the risks or solutions'.

'Time and effort' are only seen as barriers for a minority of primary producers.

Q7: Likewise there are a number of potential reasons why primary producers do not follow best practices in relation to biosecurity. To what extent does each of the following apply to you?



Base (total primary producer sample) n= 400

Examining responses against key sub groups within NSW primary producers:

By industry:

No significant differences are apparent.

By farm size:

• Primary producers from farms sized 0-99ha are less likely to cite 'not knowing what best practice measures are' as being a barrier.

By region:

- Those from the South East are more likely to cite 'irrelevance to my operation' as being a barrier.
- Those from the Murray region are more likely to cite 'cost', 'risk not being worth the
 effort', 'lack of knowledge of what best practice behaviours are' and 'not knowing
 enough about the risks' as being barriers.



It was also noted that primary producers with low levels of farm income are more likely to cite 'time', 'costs' and 'risk not worth the effort' as being key barriers.

For full tabulations of data for 'Q7 – Barriers to performing biosecurity behaviours' refer to Appendix E: Primary Producers – Analysis Tables.

7.4. Responsibility for biosecurity

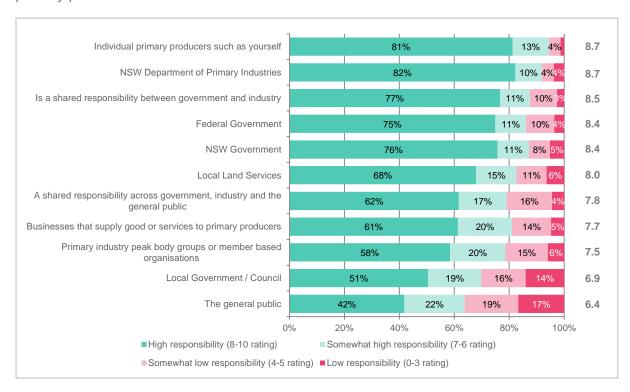
7.4.1. Where responsibility for biosecurity is seen to sit.

The responsibility for biosecurity is most likely seen to sit with both the primary producer (81%) and the NSW DPI (82%).

- 77% of primary producers believe biosecurity to be a shared responsibility between government and industry.
- 62% of primary producers believe biosecurity to be a shared responsibility between government, industry and the general population.

Primary producers are least likely to nominate the general public as being responsible for biosecurity, followed by local government.

Q9: Thinking now about where the responsibility for biosecurity sits, to what extent do you believe that each of the following groups is responsibility for biosecurity in NSW as it relates to primary producers.



Base (total primary producer sample) n= 400

Examining responses against key sub groups within NSW primary producers:

By industry:

 Primary producers involved in livestock are less likely to see responsibility as sitting with peak body groups.



By farm size:

• Primary producers from farms sized 100-999ha are more likely to see responsibility as sitting with local government / council.

By region:

- Primary producers from the Central West are more likely to see responsibility as sitting with local government / council.
- Primary producers from the Hunter are more likely to see responsibility as being a shared responsibility between government and industry.

For full tabulations of data for 'Q9 – Where responsibility for biosecurity is seen to sit' refer to Appendix E: Primary Producers – Analysis Tables.

7.4.2. Drivers of personal responsibility.

Primary producers are most likely to see their personal responsibility in biosecurity as simply being part of their obligation; especially in relation to their own land they manage (51%). An additional 26% see it part of the responsibility they have to protect their livelihood or future.

The reasons for their rating of their level of responsibility do not tend to differ according to how low or high they rated their responsibility. Those who rated their responsibility as mid-level are however less likely to be driven by personal obligation or protecting livelihood (as indicated by Ψ), and are more likely to have a broader range of reasons (as indicated by Λ).

Q10: Why do you rate your own responsibility to biosecurity that way Please type your response below.

Reasons for rating own responsibility for biosecurity	Total Sample	High level of responsibility (8-10 rating)	Med level of responsibility (4-7 rating)	Low level of responsibility (0-3 rating)
Base (n=)	(400)	(327)	(69)	(4)
Personal responsibility/obligation/Our land	51%	53%	36% ↓	67%
Protect livelihood/Business/future	26%	29%	9% ↓	49%
Important/minimise risk to industry	9%	10%	5%	0%
External/ can't control risks	4%	2%	10%	33%
Protect stock	2%	2%	2%	0%
Improve product/Product Quality/Expand markets	2%	2%	0% ↓	0%
Part of business	2%	1%	5%	0%
Compliance/Regulations	1%	1%	3%	0%
Other	10%	6%	28% ↑	0%

For full tabulations of data for 'Q10 – Drivers of personal responsibility' refer to Appendix E: Primary Producers – Analysis Tables.



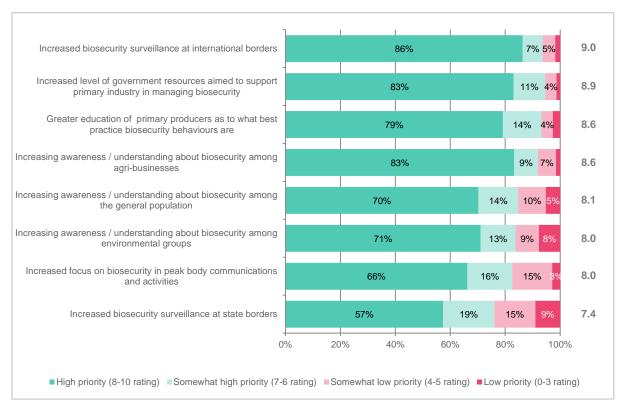
7.5. Biosecurity management strategies

7.5.1. Priorities for future management of biosecurity

Primary producers are most likely to see biosecurity surveillance at international borders as a high priority, as mentioned by 86%. They are least likely to see the equivalent surveillance at a state level as being a priority (only 57% see this as a high priority).

There is also a call for increased government resources to support industry and greater education around best practices in biosecurity.

Q11: There are a number of potential ways that biosecurity management in NSW could be made more effective. To what extent do you think each of the following strategies should be a priority moving forward?



Base (total primary producer sample) n= 400

Examining responses against key sub groups within NSW primary producers:

By industry:

No significant differences apparent.

By farm size:

No significant differences apparent.

By region:

 Those from the Sydney / Greater Sydney region are less likely to rate 'increasing awareness / understanding of biosecurity among general population' as a priority.



 Those from the North Coast and Northern Tableland regions are less likely to rate 'increased level of government resources aimed to support primary industry' as a priority.

For full tabulations of data for 'Q11 – Priorities for future management of biosecurity' refer to Appendix E: Primary Producers – Analysis Tables.

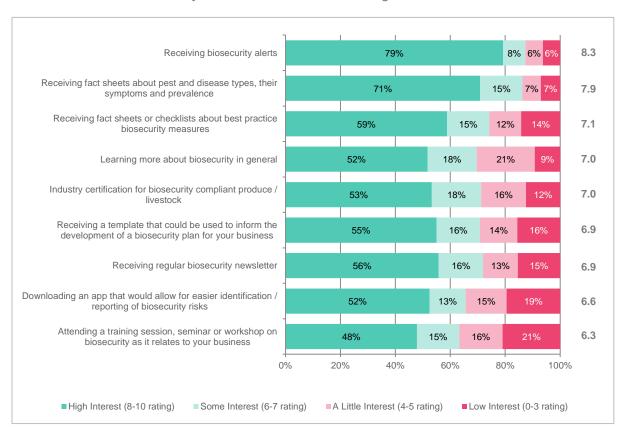
7.5.2. Personal appetite for information and/or targeted action.

Primary producers are most interested in receiving biosecurity alerts, with 79% having a high level of interest in this.

There is also a high level of support for receiving fact sheets, particularly about the symptoms and prevalence of pests and diseases, but also for checklists about best practices.

Interest is mixed however in relation to having an 'app for biosecurity identification' or for 'attending training sessions on biosecurity risks'.

Q12: How interested would you be in each of the following?



Base (total primary producer sample) n= 400

For full tabulations of data for 'Q12 – Personal appetite for information or targetted action' refer to Appendix E: Primary Producers – Analysis Tables.

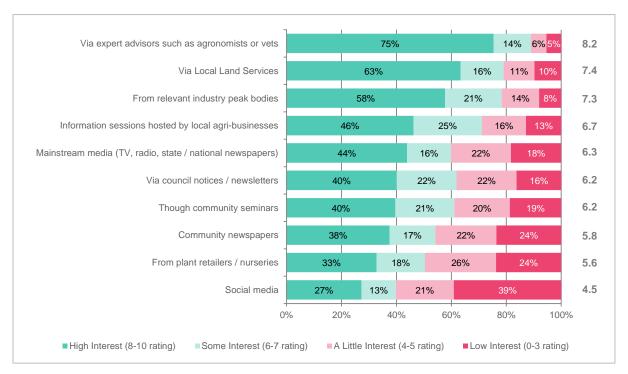


7.5.3. Preferred communication channels

Expert advisors are clearly the preferred means of receiving information and advice about biosecurity, with three in four having a high level of interest in this channel.

- There is also a high level of interest in receiving information via Local Land Services or relevant peak bodies.
- There is only minimal interest in social media as a platform for receiving biosecurity information.
- Suggestions of using plant retailers / nurseries or community newspapers were also not as well received as other channels.

Q13: And how interested would you be in receiving information and advice about biosecurity via each of the following?



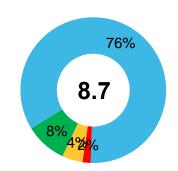
Base (total primary producer sample) n= 400

For full tabulations of data for 'Q13 – Preferred communication channels' refer to Appendix E: Primary Producers – Analysis Tables.

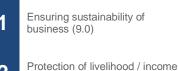
8. Primary Producer: Summary tables

Primary Producers: Total (n=400)





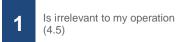
KEY DRIVERS



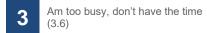
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Maximizing production/yield (8.8)

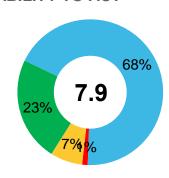
KEY BARRIERS







ABILITY TO ACT



TOP 5 BEHAVIOURS

Take steps to eradicate known disease, weeds or pests (99%)

Regularly monitor plants and/or livestock for disease, weeds or pests 2

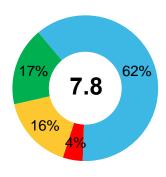
Investigate and/or report any instances or sightings of unusual 3 disease, weeds or pests (93%)

4 Ensure feed / grain / plant matter stored in optimal environment (89%)

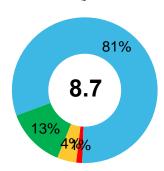
Routinely consult with experts or advisors such as vets, agronomists, etc. (85%)

WHERE RESPONSIBILITY SEEN TO SIT

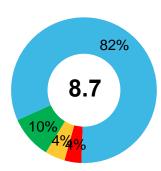
Shared



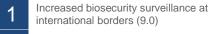
Primary Producers

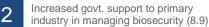


NSW DPI



APPETITE FOR ACTION **Top 5 Priorities**

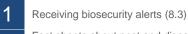


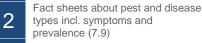


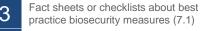


Increasing gen. population awareness / understanding of biosecurity (8.1)

Uptake of initiatives







Industry certification for biosecurity compliant produce / livestock (7.0)

Desired communications

- Via expert advisors such as agronomists or vets (8.2)
- Via Local Land Services 2
- From relevant industry peak 3 bodies (7.3)
- Info. sessions hosted by 4 local agri-businesses (6.7)
- Mainstream media (TV. radio, newspapers) (6.3)





8.2. Primary Producers by Region: Central Tablelands (n=38)

IMPORTANCE

79% 8.5

KEY DRIVERS

3

3

4

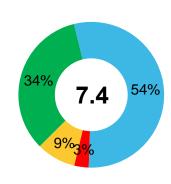


market access (9.0)

KEY BARRIERS



ABILITY TO ACT

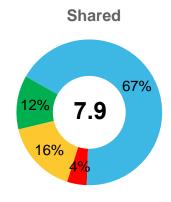


TOP 5 BEHAVIOURS

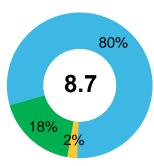


- 2 Take steps to eradicate known disease, weeds or pests (98%)
 - Investigate and/or report any instances or sightings of unusual disease, weeds or pests (95%)
 - Have established animal hygiene protocols in place (88%)
 - Ensure feed / grain / plant matter stored in optimal environment (85%)

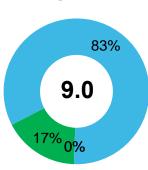
WHERE RESPONSIBILITY SEEN TO SIT



Primary Producers

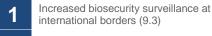


NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



- Increased govt. support to primary 2 industry in managing biosecurity (8.8)
- Greater education of best practice 3 biosecurity behaviours (8.7)
- Increasing agribusinesses awareness / 4 understanding of biosecurity (8.6)
- Increasing gen. population awareness / understanding of biosecurity (8.5)

Uptake of initiatives

1	Receiving biosecurity alerts (8.9)
2	Fact sheets about pest and disease types incl. symptoms and prevalence (8.4)
3	Receiving a template to inform the development of a biosecurity plan for your business (7.7)
4	Fact sheets or checklists about best

- practice biosecurity measures (7.5)
- Receiving regular biosecurity newsletter (7.2)

Desired communications

- Via expert advisors such as agronomists or vets (7.8)
- Via Local Land Services
- From relevant industry peak 3 bodies (7.4)
- Via council notices / 4 newsletters (7.2)
- Info. sessions hosted by local agri-businesses (6.9)



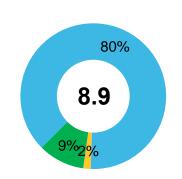
Rate 6-7





8.3. Primary Producers by Region: Central West (n=40)

IMPORTANCE



KEY DRIVERS

2

3

Maximizing quality of goods and prices achieved (9.2)

Ensuring sustainability of business (9.0)

Protection of livelihood / income

KEY BARRIERS



Is irrelevant to my operation

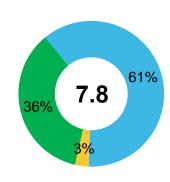
2

Am too busy, don't have the time

3

Is too costly to do (4.4)

ABILITY TO ACT



TOP 5 BEHAVIOURS

2

Take steps to eradicate known disease, weeds or pests (100%)

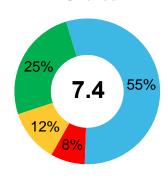
Ensure feed / grain / plant matter stored in optimal environment (97%)

Investigate and/or report any instances or sightings of unusual disease, weeds or pests (97%) Regularly monitor plants and/or livestock for disease, weeds or pests

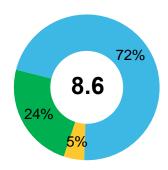
Routinely consult with experts or advisors such as vets, agronomists, etc. (93%)

WHERE RESPONSIBILITY SEEN TO SIT

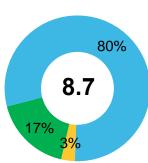
Shared



Primary Producers



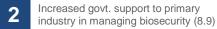
NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



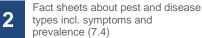




Increased biosecurity surveillance at state borders (8.0)

Uptake of initiatives





Receiving a template to inform the 5 development of a biosecurity plan for your business (6.9)

Desired communications

- Via expert advisors such as agronomists or vets (8.4)
- Via Local Land Services
- Mainstream media (TV, 3 radio, newspapers) (7.1)
- From relevant industry peak 4 bodies (7.1)
- Community newspapers (6.8)

3

4

Rate 0-3 Rate 4-5

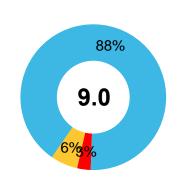
Rate 6-7





8.4. Primary Producers by Region: Sydney/Greater Sydney (n=36)

IMPORTANCE



KEY DRIVERS

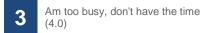


3

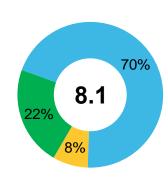
KEY BARRIERS







ABILITY TO ACT



TOP 5 BEHAVIOURS

Regularly monitor plants and/or livestock for disease, weeds or pests

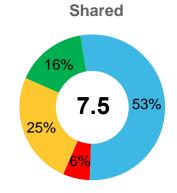
2 Take steps to eradicate known disease, weeds or pests (98%)

Investigate and/or report any instances or sightings of unusual disease, weeds or pests (92%)

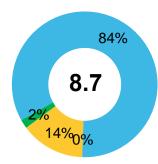
4 Limit non-employee movements on site (86%)

Ensure feed / grain / plant matter stored in optimal environment (82%)

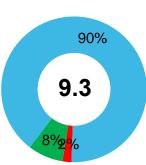
WHERE RESPONSIBILITY SEEN TO SIT



Primary Producers



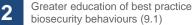
NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



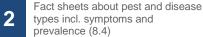




Increasing agribusinesses awareness / understanding of biosecurity (8.3)

Uptake of initiatives





Receiving regular biosecurity newsletter (7.6)

Desired communications

- Via expert advisors such as agronomists or vets (8.4)
- From relevant industry peak bodies (8.0)
- Via Local Land Services 3
- Info. sessions hosted by 4 local agri-businesses (6.7)
- From plant retailers / nurseries (6.2)

3

4



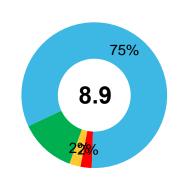






8.5. Primary Producers by Region: Hunter (n=37)

IMPORTANCE



KEY DRIVERS

3

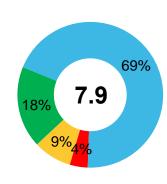
4

- Ensuring sustainability of business (9.3)
- Maximizing quality of goods and prices achieved (8.7)
- Maximizing production/yield

KEY BARRIERS

- Do not know enough about the risks or what I can do about them (2.7)
- Is irrelevant to my operation 2
- 3 Is too costly to do (2.6)

ABILITY TO ACT

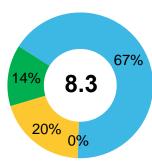


TOP 5 BEHAVIOURS

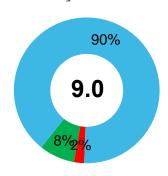
- Regularly monitor plants and/or livestock for disease, weeds or pests
- Take steps to eradicate known disease, weeds or pests (100%)
 - Investigate and/or report any instances or sightings of unusual disease, weeds or pests (100%)
 - Have established human hygiene protocols in place (94%)
 - Have established animal hygiene protocols in place (87%)

WHERE RESPONSIBILITY SEEN TO SIT

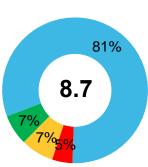




Primary Producers



NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



- Greater education of best practice 2 biosecurity behaviours (8.7)
- Increased biosecurity surveillance at 3 international borders (8.7)
 - Increasing agribusinesses awareness / understanding of biosecurity (8.6)
- Increasing gen. population awareness / understanding of biosecurity (8.5)

Uptake of initiatives

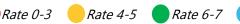


- Fact sheets about pest and disease 2 types incl. symptoms and prevalence (8.5)
- Receiving regular biosecurity 3 newsletter (7.5)
- Fact sheets or checklists about best 4 practice biosecurity measures (7.5)
- Receiving a template to inform the 5 development of a biosecurity plan for your business (7.5)

Desired communications

- Via expert advisors such as agronomists or vets (8.6)
- From relevant industry peak bodies (8.0)
- Info. sessions hosted by local agri-businesses (7.0)
- Via Local Land Services 4
- Though community seminars (6.0)



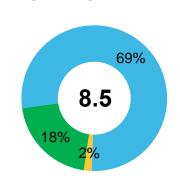






8.6. Primary Producers by Region: Murray (n=37)

IMPORTANCE



KEY DRIVERS

3

Maximizing production/yield (9.2)

Protection of livelihood / income

Maximizing quality of goods and prices achieved (9.1)

KEY BARRIERS



Is too costly to do (5.4)

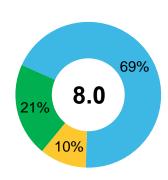
2

Is irrelevant to my operation

3

Do not know enough about the risks or what I can do about them (5.2)

ABILITY TO ACT



TOP 5 BEHAVIOURS



Regularly monitor plants and/or livestock for disease, weeds or pests

Take steps to eradicate known disease, weeds or pests (100%)

Ensure feed / grain / plant matter stored in optimal environment

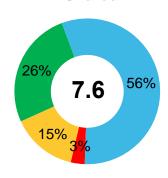
4

Investigate and/or report any instances or sightings of unusual disease, weeds or pests (97%)

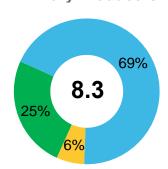
Routinely consult with experts or advisors such as vets, agronomists,

WHERE RESPONSIBILITY SEEN TO SIT

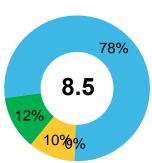
Shared



Primary Producers



NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



Increased govt. support to primary 2 industry in managing biosecurity (8.8)

> Increasing gen. population awareness / understanding of biosecurity (8.6)

Increasing agribusinesses awareness / understanding of biosecurity (8.5)

Increasing awareness / understanding 5 about biosecurity among environmental groups (8.1)

Uptake of initiatives



Fact sheets about pest and disease types incl. symptoms and prevalence (7.1)

Fact sheets or checklists about best practice biosecurity measures (6.7)

Learning more about biosecurity in general (6.7)

Industry certification for biosecurity compliant produce / livestock (6.4)

Desired communications

Via expert advisors such as agronomists or vets (8.5)

Via Local Land Services

From relevant industry peak 3 bodies (6.8)

Mainstream media (TV, radio, newspapers) (6.5)

4

Through community seminars (6.3)

Rate 0-3

3

4







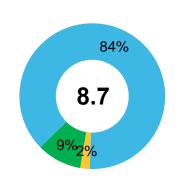


8.7. Primary Producers by Region: North Coast (n=36)

3

3

IMPORTANCE

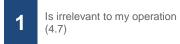


KEY DRIVERS

Ensuring sustainability of business (8.9) Maximizing quality of goods and prices achieved (8.9)

Maximizing production/yield

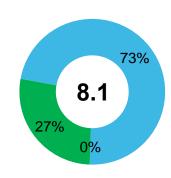
KEY BARRIERS





Am too busy, don't have the time 3

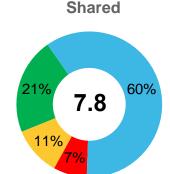
ABILITY TO ACT



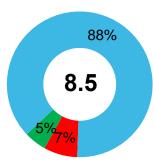
TOP 5 BEHAVIOURS

- Regularly monitor plants and/or livestock for disease, weeds or pests
- 2 Take steps to eradicate known disease, weeds or pests (98%)
 - Ensure feed / grain / plant matter stored in optimal environment (92%)
- Investigate and/or report any instances or sightings of unusual 4 disease, weeds or pests (89%)
 - Only purchase livestock / plant matter / feed from certified providers

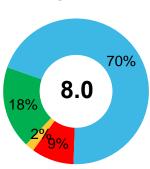
WHERE RESPONSIBILITY SEEN TO SIT



Primary Producers



NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



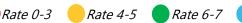
- Increasing agribusinesses awareness / understanding of biosecurity (8.5)
- Greater education of best practice 3 biosecurity behaviours (8.4)
- Increased govt. support to primary 4 industry in managing biosecurity (8.3)
- Increased focus on biosecurity in peak body communications and activities (7.5)

Uptake of initiatives

- Fact sheets about pest and disease types incl. symptoms and prevalence (7.9)
- Fact sheets or checklists about best 2 practice biosecurity measures (7.3)
- Learning more about biosecurity in 3 general (6.9)
- 4 Receiving biosecurity alerts (6.9)
- Receiving a template to inform the 5 development of a biosecurity plan for your business (6.5)

Desired communications

- Via Local Land Services (7.4)
- Via expert advisors such as 2 agronomists or vets (7.3)
- From relevant industry peak bodies (6.8)
- Via council notices / 4 newsletters (6.1)
- Info. sessions hosted by local agri-businesses (5.6)







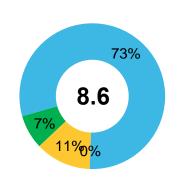


8.8. Primary Producers by Region: North West (n=38)

3

2

IMPORTANCE



KEY DRIVERS

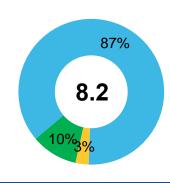
Ensuring sustainability of business (9.1) Reduced incursions from diseases, pests, weeds (9.1)

Protection of livelihood / income

KEY BARRIERS

- Is irrelevant to my operation (4.2)
- 2 Is too costly to do (4.1)
 - Am too busy, don't have the time

ABILITY TO ACT

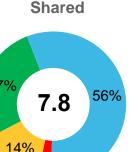


TOP 5 BEHAVIOURS

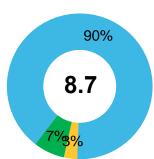
3

- Take steps to eradicate known disease, weeds or pests (100%)
 - Regularly monitor plants and/or livestock for disease, weeds or pests
- 3 Ensure feed / grain / plant matter stored in optimal environment (95%)
- 3 Have established animal hygiene protocols in place (95%)
 - Have established vehicle and machinery hygiene protocols in place

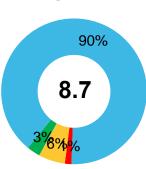
WHERE RESPONSIBILITY SEEN TO SIT



Primary Producers

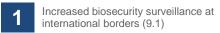


NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



- Increased govt. support to primary 2 industry in managing biosecurity (8.7)
 - Increasing agribusinesses awareness / understanding of biosecurity (8.7)
- Increasing awareness / understanding 4 about biosecurity among environmental
 - Greater education of best practice biosecurity behaviours (8.1)

Uptake of initiatives

- Receiving biosecurity alerts (8.5)
- Fact sheets about pest and disease types incl. symptoms and prevalence (7.7)
- Receiving regular biosecurity newsletter (7.3)
- Downloading an app that would 4 allow for easier identification / reporting of biosecurity risks (7.1)
- Learning more about biosecurity in 5 general (7.1)

Desired communications

- Via expert advisors such as agronomists or vets (8.9)
- Via Local Land Services
- From relevant industry peak bodies (7.5)
- Info. sessions hosted by 4 local agri-businesses (7.1)
- Mainstream media (TV, radio, newspapers) (6.1)



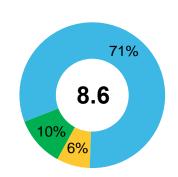






8.9. Primary Producers by Region: Northern Tablelands (n=31)

IMPORTANCE



KEY DRIVERS

3

3

4

Ensuring sustainability of business (9.1) 2

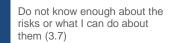
Protection of livelihood / income (9.1)

Ensuring animal welfare (9.0)

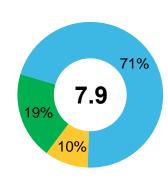
KEY BARRIERS







ABILITY TO ACT



TOP 5 BEHAVIOURS

3

Regularly monitor plants and/or livestock for disease, weeds or pests

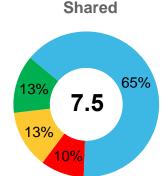
Take steps to eradicate known disease, weeds or pests (100%)

Investigate and/or report any instances or sightings of unusual disease, weeds or pests (94%)

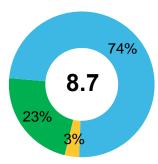
Ensure feed / grain / plant matter stored in optimal environment (90%)

Have established animal hygiene protocols in place (84%)

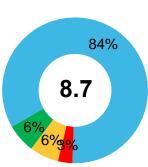
WHERE RESPONSIBILITY SEEN TO SIT



Primary Producers

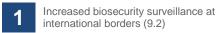


NSW DPI

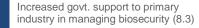


APPETITE FOR ACTION

Top 5 Priorities



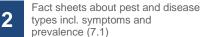
Increasing agribusinesses awareness / 2 understanding of biosecurity (8.7)



Increasing gen. population awareness / understanding of biosecurity (7.8)

Uptake of initiatives





Fact sheets or checklists about best practice biosecurity measures (6.3)

Desired communications

- Via expert advisors such as agronomists or vets (7.7)
- Via Local Land Services
- From relevant industry peak 3 bodies (6.7)
- Info. sessions hosted by 4 local agri-businesses (6.4)
- Via council notices / newsletters (6.3)

3







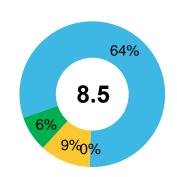


8.10. Primary Producers by Region: Riverina (n=38)

3

2

IMPORTANCE



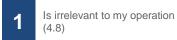
KEY DRIVERS

Protection of livelihood / income

Ensuring sustainability of business (8.7)

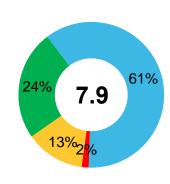
Reduces likelihood of additional cost/expenses being incurred in future (8.7)

KEY BARRIERS



- 2 Is too costly to do (4.2)
 - Am too busy, don't have the time

ABILITY TO ACT



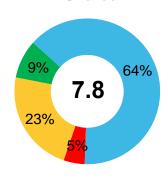
TOP 5 BEHAVIOURS

3

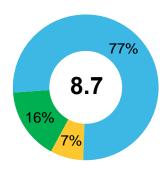
- Take steps to eradicate known disease, weeds or pests (98%)
 - Ensure feed / grain / plant matter stored in optimal environment (98%)
- Routinely consult with experts or advisors such as vets, agronomists, etc. (97%)
- Regularly monitor plants and/or livestock for disease, weeds or pests 4
 - Investigate and/or report any instances or sightings of unusual disease, weeds or pests (91%)

WHERE RESPONSIBILITY SEEN TO SIT

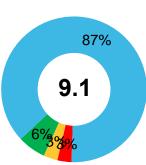
Shared



Primary Producers

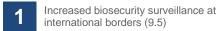


NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



- Increased govt. support to primary 2 industry in managing biosecurity (9.3)
 - Greater education of best practice biosecurity behaviours (8.7)
 - Increasing agribusinesses awareness / understanding of biosecurity (8.6)
- Increasing gen. population awareness / understanding of biosecurity (8.3)

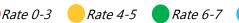
Uptake of initiatives

- Receiving biosecurity alerts (8.7)
- Fact sheets about pest and disease types incl. symptoms and prevalence (8.3)
- Receiving regular biosecurity newsletter (7.4)
- Industry certification for biosecurity 4 compliant produce / livestock (7.3)
- Receiving a template to inform the 5 development of a biosecurity plan for your business (7.0)

Desired communications

- Via expert advisors such as agronomists or vets (8.8)
- Mainstream media (TV, radio, newspapers) (7.6)
- From relevant industry peak bodies (7.6)
- Info. sessions hosted by 4 local agri-businesses (7.4)
- Via Local Land Services

3

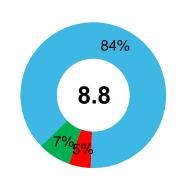






8.11. Primary Producers by Region: South East (n=36)

IMPORTANCE



KEY DRIVERS

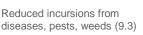


3

2

4

KEY BARRIERS



Ensuring sustainability of

business (8.9)



Is irrelevant to my operation (5.9)

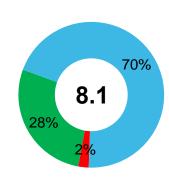
2

Is too costly to do (4.2)

3

Do not know what best practice measures are (4.0)

ABILITY TO ACT



TOP 5 BEHAVIOURS

Take steps to eradicate known disease, weeds or pests (95%)

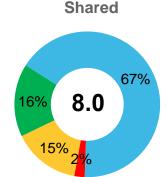
Regularly monitor plants and/or livestock for disease, weeds or pests

Investigate and/or report any instances or sightings of unusual disease, weeds or pests (91%)

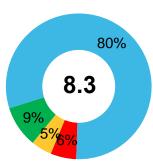
Routinely consult with experts or advisors such as vets, agronomists, etc. (88%)

Ensure feed / grain / plant matter stored in optimal environment (85%)

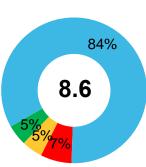
WHERE RESPONSIBILITY SEEN TO SIT



Primary Producers



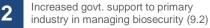
NSW DPI

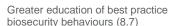


APPETITE FOR ACTION

Top 5 Priorities

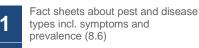






Increasing gen. population awareness / understanding of biosecurity (8.2)

Uptake of initiatives

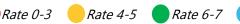




Fact sheets or checklists about best 3 practice biosecurity measures (8.1)

Desired communications

- Via expert advisors such as agronomists or vets (7.6)
- Via Local Land Services 2
- From relevant industry peak bodies (7.3)
- Info. sessions hosted by 4 local agri-businesses (6.6)
 - Via council notices / newsletters (6.5)









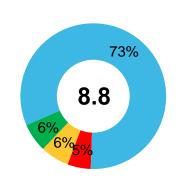
8.12. Primary Producers by Region: Western (n=33)

3

2

3

IMPORTANCE



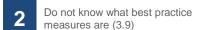
KEY DRIVERS

Protection of livelihood / income (9.7)Ensuring sustainability of business (9.4)

Maximizing production/yield

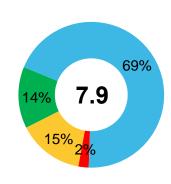
KEY BARRIERS





3 Is too costly to do (3.4)

ABILITY TO ACT



TOP 5 BEHAVIOURS

Take steps to eradicate known disease, weeds or pests (100%)

Regularly monitor plants and/or livestock for disease, weeds or pests

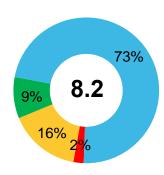
Have established human hygiene protocols in place (87%)

Investigate and/or report any instances or sightings of unusual 4 disease, weeds or pests (86%)

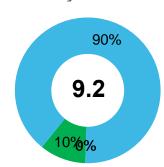
Have established vehicle and machinery hygiene protocols in place

WHERE RESPONSIBILITY SEEN TO SIT

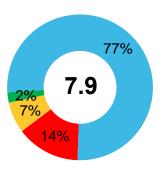




Primary Producers

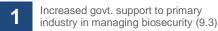


NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



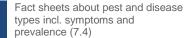
Increased biosecurity surveillance at 2 international borders (9.1)



Increasing gen. population awareness / understanding of biosecurity (8.9)

Uptake of initiatives





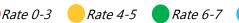
Receiving a template to inform the development of a biosecurity plan for your business (7.0)

Desired communications

- Via expert advisors such as agronomists or vets (7.8)
- Via Local Land Services
- Mainstream media (TV, 3 radio, newspapers) (7.3)
- Info. sessions hosted by 4 local agri-businesses (7.1)
- From relevant industry peak bodies (6.9)

3

4







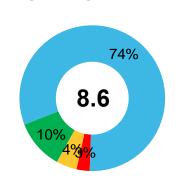
2

4



8.13. Primary Producers by Industry: Livestock (n=286)

IMPORTANCE



KEY DRIVERS



KEY BARRIERS



Is irrelevant to my operation (4.1)

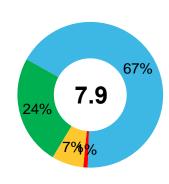
2

Is too costly to do (3.7)

3

Do not know what best practice measures are (3.5)

ABILITY TO ACT



TOP 5 BEHAVIOURS

Regularly monitor plants and/or livestock for disease, weeds or pests

2

3

Take steps to eradicate known disease, weeds or pests (98%)

Investigate and/or report any instances or sightings of unusual disease, weeds or pests (93%)

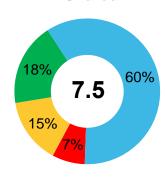
4

Ensure feed / grain / plant matter stored in optimal environment (92%)

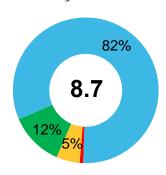
Have established animal hygiene protocols in place (91%)

WHERE RESPONSIBILITY SEEN TO SIT

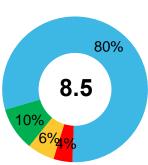
Shared



Primary Producers

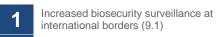


NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



- Increased govt. support to primary 2 industry in managing biosecurity (8.8)
 - Greater education of best practice biosecurity behaviours (8.6)
- Increasing agribusinesses awareness / 4 understanding of biosecurity (8.5)
- Increasing gen. population awareness / understanding of biosecurity (8.1)

Uptake of initiatives



- Fact sheets about pest and disease types incl. symptoms and prevalence (7.9)
- Fact sheets or checklists about best practice biosecurity measures (7.2)
- Learning more about biosecurity in 4 general (7.1)
- Receiving regular biosecurity newsletter (7.0)

Desired communications

- - Via expert advisors such as agronomists or vets (7.9)
- Via Local Land Services
- From relevant industry peak 3 bodies (7.1)
- Info. sessions hosted by 4 local agri-businesses (6.6)
- Via council notices / newsletters (6.4)







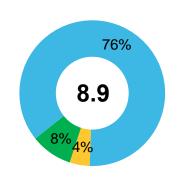


8.14. Primary Producers by Industry: Cropping (n=48)

3

2

IMPORTANCE



KEY DRIVERS

Protection of livelihood / income Ensuring sustainability of

business (9.1)

Reduced incursions from diseases, pests, weeds (9.1)

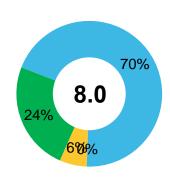
KEY BARRIERS





Am too busy, don't have the time 3

ABILITY TO ACT



TOP 5 BEHAVIOURS

Take steps to eradicate known disease, weeds or pests (100%)

Ensure feed / grain / plant matter stored in optimal environment (98%)

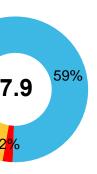
Regularly monitor plants and/or livestock for disease, weeds or pests

Investigate and/or report any instances or sightings of unusual 4 disease, weeds or pests (94%)

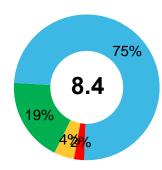
Routinely consult with experts or advisors such as vets, agronomists,

WHERE RESPONSIBILITY SEEN TO SIT

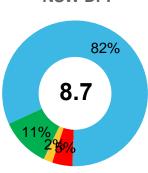




Primary Producers

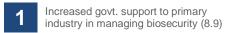


NSW DPI

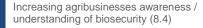


APPETITE FOR ACTION

Top 5 Priorities



Increased biosecurity surveillance at international borders (8.9)



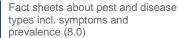


Increasing awareness / understanding about biosecurity among enviro. grp (8.2)

Uptake of initiatives

general (6.9)





Learning more about biosecurity in

Desired communications

- Via expert advisors such as agronomists or vets (8.9)
- Via Local Land Services
- From relevant industry peak 3 bodies (7.4)
- Mainstream media (TV, 4 radio, newspapers) (7.1)
- Info. sessions hosted by local agri-businesses (7.0)

2

3

4





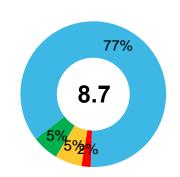


2



8.15. Primary Producers by Industry: Horticulture (n=57)

IMPORTANCE



KEY DRIVERS

3

2

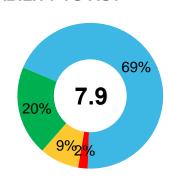
3

- Ensuring sustainability of business (9.3)
- Maximizing production/yield
- Maximizing quality of goods and prices achieved (9.1)

KEY BARRIERS

- Is irrelevant to my operation
- 2 Is too costly to do (3.8)
- Do not know enough about the 3 risks or what I can do about them (3.7)

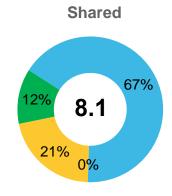
ABILITY TO ACT



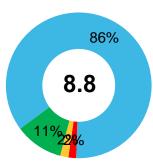
TOP 5 BEHAVIOURS

- Take steps to eradicate known disease, weeds or pests (100%)
 - Regularly monitor plants and/or livestock for disease, weeds or pests
 - Investigate and/or report any instances or sightings of unusual disease, weeds or pests (89%)
- 4 Have established human hygiene protocols in place (89%)
 - Routinely consult with experts or advisors such as vets, agronomists, etc. (81%)

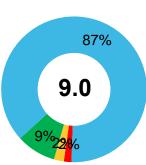
WHERE RESPONSIBILITY SEEN TO SIT



Primary Producers



NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



- Increased biosecurity surveillance at 2 international borders (9.0)
- Greater education of best practice 3 biosecurity behaviours (8.9)
 - Increasing agribusinesses awareness / understanding of biosecurity (8.9)
- Increased focus on biosecurity in peak body communications and activities (8.1)

Uptake of initiatives

- Receiving biosecurity alerts (7.9)
- Fact sheets about pest and disease 2 types incl. symptoms and prevalence (7.4)
- Fact sheets or checklists about best practice biosecurity measures (7.0)
 - Receiving a template to inform the development of a biosecurity plan for your business (6.8)
- Learning more about biosecurity in general (6.7)

Desired communications

- Via expert advisors such as agronomists or vets (7.8)
- From relevant industry peak bodies (7.5)
- Via Local Land Services 3
- Via council notices / 4 newsletters (6.3)
- Info. sessions hosted by local agri-businesses (6.3)

4



Rate 6-7





8.16. Primary Producers by Industry: Forestry (Low Base n=5)

IMPORTANCE 100%

KEY DRIVERS

KEY BARRIERS



Environmental protection (9.8)

Reduces likelihood of additional cost/expenses being incurred in future (9.8)

Tied to occupational health and safety (9.6)

Is irrelevant to my operation (6.4)

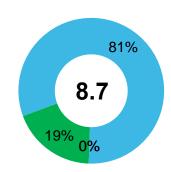
Am too busy, don't have the time 2

> Do not know what best practice measures are (2.8)



TOP 5 BEHAVIOURS

3



Take steps to eradicate known disease, weeds or pests (100%)

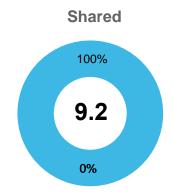
Limit non-employee movements on site (100%)

Have established human hygiene protocols in place (89%)

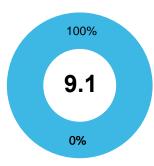
Investigate and/or report any instances or sightings of unusual disease, weeds or pests (81%)

Regularly monitor plants and/or livestock for disease, weeds or pests AND Have established vehicle / machinery hygiene protocols (81%)

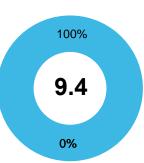
WHERE RESPONSIBILITY SEEN TO SIT



Primary Producers

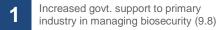


NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



Increased biosecurity surveillance at international borders (9.8)

Increasing gen. population awareness / understanding of biosecurity (9.1)

Increasing agribusinesses awareness / understanding of biosecurity (8.9)

Greater education of best practice biosecurity behaviours (8.9)

Uptake of initiatives

Fact sheets about pest and disease types incl. symptoms and prevalence (9.4)

Fact sheets or checklists about best 1 practice biosecurity measures (9.4)

Receiving biosecurity alerts (9.2)

Learning more about biosecurity in 4 general (9.1)

Receiving regular biosecurity newsletter (9.1)

Desired communications

From relevant industry peak bodies (8.5)

Via expert advisors such as 2 agronomists or vets (8.1)

Info. sessions hosted by local agri-businesses (7.6)

Via Local Land Services 4

Social Media (6.4)

1









8.17. Primary Producers by Industry: Fisheries (Low Base n=4)

IMPORTANCE



KEY DRIVERS



business (9.2)

3

KEY BARRIERS



Is too costly to do (2.7)

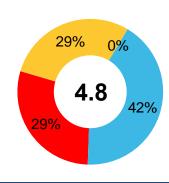


Am too busy, don't have the time



Do not know what best practice measures are AND Do not know enough about the risks or what I can do about them (2.2)

ABILITY TO ACT



TOP 5 BEHAVIOURS



Routinely consult with experts or advisors such as vets, agronomists, etc. (100%)

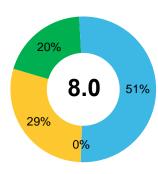
Have established animal hygiene protocols in place (100%)

Investigate and/or report any instances or sightings of unusual disease, weeds or pests (100%)

Regularly monitor plants and/or livestock for disease, weeds or pests

WHERE RESPONSIBILITY SEEN TO SIT

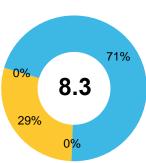




Primary Producers

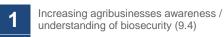


NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



- Increased biosecurity surveillance at international borders (8.6)
- Greater education of best practice 3 biosecurity behaviours (8.5)
- Increased govt. support to primary 3 industry in managing biosecurity (8.5)
- Increased focus on biosecurity in peak body communications and activities (8.4)

Uptake of initiatives

- Receiving biosecurity alerts (9.6)
- Fact sheets or checklists about best practice biosecurity measures (9.4)
- Fact sheets about pest and disease 3 types incl. symptoms and prevalence (9.0)
- Learning more about biosecurity in 4 general (9.0)
 - Receiving regular biosecurity newsletter (8.6)

Desired communications

- Via expert advisors such as agronomists or vets (9.6)
- From relevant industry peak 2 bodies (9.2)
- Info. sessions hosted by local agri-businesses (7.4)
- Via Local Land Services 4
- Though community seminars (5.1)









8.18. Primary Producers by Farm Size: 0-99 ha (n=92)

3

2

IMPORTANCE

81%

KEY DRIVERS

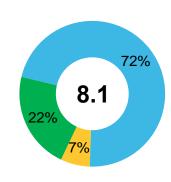
Ensuring sustainability of business (9.2)

- Protection of livelihood / income
- Reduced incursions from diseases, pests, weeds (8.9)

KEY BARRIERS

- Is irrelevant to my operation
- 2 Is too costly to do (3.7)
 - Am too busy, don't have the time

ABILITY TO ACT



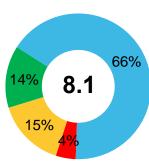
TOP 5 BEHAVIOURS

3

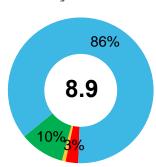
- Take steps to eradicate known disease, weeds or pests (99%)
 - Regularly monitor plants and/or livestock for disease, weeds or pests
- Investigate and/or report any instances or sightings of unusual 3 disease, weeds or pests (88%)
- 4 Ensure feed / grain / plant matter stored in optimal environment (85%)
 - Routinely consult with experts or advisors such as vets, agronomists, etc. (83%)

WHERE RESPONSIBILITY SEEN TO SIT

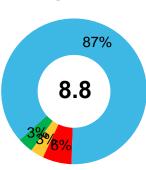




Primary Producers

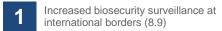


NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



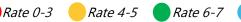
- Increased govt. support to primary 2 industry in managing biosecurity (8.8)
- Increasing agribusinesses awareness / 3 understanding of biosecurity (8.7)
- Greater education of best practice 4 biosecurity behaviours (8.5)
- Increased focus on biosecurity in peak body communications and activities (7.9)

Uptake of initiatives

- Receiving biosecurity alerts (8.0)
- Fact sheets about pest and disease types incl. symptoms and prevalence (7.7)
- Fact sheets or checklists about best practice biosecurity measures (6.9)
 - Receiving a template to inform the development of a biosecurity plan for your business (6.8)
 - Industry certification for biosecurity compliant produce / livestock (6.7)

Desired communications

- Via expert advisors such as agronomists or vets (8.1)
- From relevant industry peak bodies (7.4)
- Via Local Land Services 3
- Info. sessions hosted by 4 local agri-businesses (6.3)
- Via council notices / newsletters (6.2)

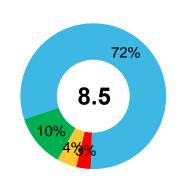






8.19. Primary Producers by Farm Size: 100-999 ha (n=134)

IMPORTANCE



KEY DRIVERS



3

3

4

Protection of livelihood / income

KEY BARRIERS



Is irrelevant to my operation

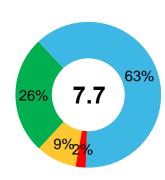
2

Is too costly to do (4.3)

3

Do not know what best practice measures are (4.0)

ABILITY TO ACT



TOP 5 BEHAVIOURS

Regularly monitor plants and/or livestock for disease, weeds or pests

2 Take steps to eradicate known disease, weeds or pests (97%)

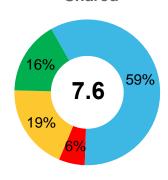
Investigate and/or report any instances or sightings of unusual disease, weeds or pests (92%)

Have established animal hygiene protocols in place (86%)

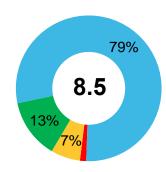
Ensure feed / grain / plant matter stored in optimal environment (86%)

WHERE RESPONSIBILITY SEEN TO SIT

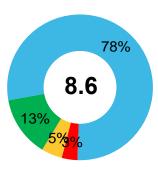
Shared



Primary Producers

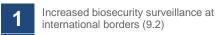


NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



- Increased govt. support to primary 2 industry in managing biosecurity (8.9)
 - Increasing agribusinesses awareness / understanding of biosecurity (8.5)
- Greater education of best practice 4 biosecurity behaviours (8.5)
- Increasing gen. population awareness / understanding of biosecurity (8.0)

Uptake of initiatives

- Receiving biosecurity alerts (8.2)
- Fact sheets about pest and disease types incl. symptoms and prevalence (8.2)
- Fact sheets or checklists about best practice biosecurity measures (7.2)
- Learning more about biosecurity in 4 general (7.2)
- Receiving regular biosecurity newsletter (7.0)

Desired communications

- Via expert advisors such as agronomists or vets (7.9)
- Via Local Land Services
- From relevant industry peak 3 bodies (7.0)
- Via council notices / 4 newsletters (6.7)
- Info. sessions hosted by local agri-businesses (6.7)







8.20. Primary Producers by Farm Size: 1000 ha or larger (n=166)

IMPORTANCE

75% 8.7

KEY DRIVERS

Protection of livelihood / income (9.2)Ensuring sustainability of business (9.2)

3

2

3

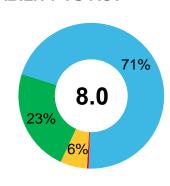
Reduced incursions from

diseases, pests, weeds (9.0)

KEY BARRIERS

- Is irrelevant to my operation (4.3)
- 2 Is too costly to do (4.1)
- Do not know what best practice 3 measures are (3.8)

ABILITY TO ACT

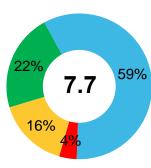


TOP 5 BEHAVIOURS

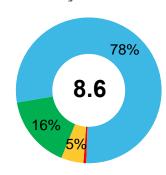
- Take steps to eradicate known disease, weeds or pests (100%)
 - Regularly monitor plants and/or livestock for disease, weeds or pests
 - Investigate and/or report any instances or sightings of unusual disease, weeds or pests (96%)
- 4 Ensure feed / grain / plant matter stored in optimal environment (95%)
 - Routinely consult with experts or advisors such as vets, agronomists, etc. (88%)

WHERE RESPONSIBILITY SEEN TO SIT

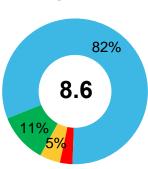




Primary Producers

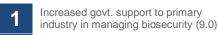


NSW DPI



APPETITE FOR ACTION

Top 5 Priorities



- Increased biosecurity surveillance at 2 international borders (8.9)
 - Greater education of best practice biosecurity behaviours (8.6)
- Increasing agribusinesses awareness / 4 understanding of biosecurity (8.5)
- Increasing gen. population awareness / understanding of biosecurity (8.2)

Uptake of initiatives

- Receiving biosecurity alerts (8.5)
- Fact sheets about pest and disease 2 types incl. symptoms and prevalence (7.8)
- Industry certification for biosecurity 3 compliant produce / livestock (7.1)
- Receiving regular biosecurity 4 newsletter (7.1)
 - Learning more about biosecurity in general (7.0)

Desired communications

- Via expert advisors such as agronomists or vets (8.4)
- Via Local Land Services
- From relevant industry peak bodies (7.4)
- Info. sessions hosted by 4 local agri-businesses (6.9)
- Mainstream media (TV, radio, newspapers) (6.6)







