

# Expert Panel Review

## Provisional Final Report - October 2022

Department of Agriculture Fisheries and Forestry

### *Review of the biosecurity risks of prawns imported from all countries for human consumption*

#### Expert Panel

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(November 2022)

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## Summary

This Review provides advice to the Department of Agriculture, Fisheries and Forestry (DAFF) on its updated Provisional Final Report *Review of the biosecurity risks of prawns imported from all countries for human consumption (October 2022)*. The 2022 Report is an extensive update of the Draft Report released in September 2020 in response to input from stakeholders and other sources to the 2020 draft.

The Expert Panel commends the Department on its revisions and finds that the Department has met the requirements as set out in the Expert Panel's Terms of Reference, namely:

- department has appropriately considered the findings on the expert panel report
- department has appropriately considered the stakeholder submissions received in response to the draft report
- department has included and properly considered all new scientific evidence received since the draft report was prepared
- conclusions of the Provisional Final Report are scientifically reasonable and based on the material presented and available.

A few minor issues remain for the Department to consider with a view to improving clarity.

## Key points

The Department received extensive comments on its Draft Report (2020) from industry, government, and researchers. In addition, the Draft Report (2020) was reviewed by the Expert Panel (April 2021).

In responding to these inputs, the Provisional Final Report (2022) was informed by six substantial new pieces of information:

- The results of the *National recreational fishing survey 2019-20* on the use of prawns as bait and berley
- The University of Arizona study (2022) into the impact of cooking and freezing on several prawn diseases
- New testing regimes and their justification
- Test results from the Department's recent surveillance and monitoring operations at the Australian border and from Australian retail settings
- Progress on the implementation of the 22 recommendations of the Inspector General of Biosecurity (2017)
- New scientific findings from the literature text.

These additions, the provision of new tables and figures, and the many other editorial changes throughout the report have increased its clarity and have addressed stakeholder concerns.

The Expert Panel notes in particular:

- Table 1 (page ix) is an excellent overview of the impact of different biosecurity measures and their effect on ALOP for the 10 target diseases.
- A comprehensive view of the source information that underpins Table 1, is provided in Table 25 in Appendix F.
- Chapter 1 (The Introduction) provides essential new background information on the major issues including the nature of the Australian prawn industry, the white spot disease outbreak, and the Inspector General of Biosecurity's (IGB) 2017 report.
- Chapter 2, Figure 2, is a clear statement of the components of the import risk analysis process.
- Chapter 3, Table 5 has been updated with current literature, which addresses concerns of many stakeholders.
- Chapter 4 has been shortened and now gives a clear view of the components of the risk assessment process, including two new tables: Table 7 summaries major and minor exposure pathways for imported prawns and Table 8 summarises the key considerations for each direct and indirect impact criterion used in the risk assessment process. This chapter has been greatly improved by transferring much of the detailed arguments to Appendix D.
- Chapter 5 has been updated in response to questions and concerns from stakeholders. It also includes an updated section on cooking and the science

supporting the requirement for a particular core temperature (65°C) to be reached in the cooking process.

- Chapters 6-15 detail the risk assessments for the ten diseases of interest. They have been revised to reflect recent additions to the literature and feedback from stakeholders.
- Chapter 16 has an expanded introduction that provides better context for the biosecurity requirements given in this chapter.
- Chapter 17 is new, and it gives details of sampling procedures and results from testing over recent years. This chapter addresses several stakeholder issues raised in the submissions.
- Appendix A lists the recommendations of the Expert Panel. These recommendations have been covered by the Department's responses in Appendix B.
- Appendix B provides the Department's response to the 65 key issues raised by stakeholders. In general, the Department has given considered answers to these matters and modified the report where appropriate.
- Appendix C gives the Department's response to the 22 recommendations of the IGB 2017 report. We note that 20 of the 22 recommendations have been addressed and the other two are in progress.

## Areas of Focus in the Final Report

A small number of residual issues remain for the Department to consider in preparation of the final report. In general, these are minor and are discussed in Appendix 1 to this Review (see below).

One noteworthy matter concerns Chapter 16 which describes the proposed biosecurity measures for imported prawns. This is a pivotal chapter and while the underlying methodology is not in question, the logical flow was not clear. Careful revision of sections 16.2 and 16.3 to ensure that the biosecurity requirements are unambiguous will assist stakeholders in their understanding. The Expert Panel has corresponded with the Department and provided our suggested minor changes to the text in these sections.

## Appendix 1. Expert Panel's assessment of DAFF's response to Stakeholders and the 2021 Expert Panel Review Recommendations

The Expert Panel had three sources of information about Stakeholder concerns:

1. Appendix B in the Provisional Final Report – this gives DAFF's summary of what it considers to be the 65 issues raised by stakeholder plus DAFF's response to those issues
2. The Expert Panel's own, earlier assessment of stakeholder concerns that formed the basis of Appendix 2 in its first report (April 2021)
3. The Inspector General of Biosecurity (2017) report with its 22 recommendations.

The Expert Panel found that DAFF has addressed all the issues raised by Government stakeholders, and almost all the issues raised by the science and industry stakeholder groups; the Provisional Final Report has been adjusted accordingly. Table 1 below provides comments for the Department's consideration on the remaining issues.

**Table 1. Expert Panels' View of Residual Issues in the Provisional Final Report (2022)**

Origin of Issue	Comment	Expert Panel Response (November 22)
<b>1. Appendix B, Issue 65 (page 310)</b>  Stakeholders commented that the review does not consider inspection confusion, system rorting, testing failure, human error, and deliberate criminal evasion.	Noted by DAFF in Appendix B of Provisional Final Report (October 2022).  The Department has noted the comment and indicated how it has responded in the Provisional Final Report in the second column of issue 65 but in the third column it indicates that it has not made any change to the Provisional Final Report	<b>PARTIALLY ADDRESSED</b>  The Expert Panel believes that this issue has been addressed by DAFF in the new Chapter 17, and in the new Appendix C.  The Expert Panel recommends that the comment in column 3, Appendix B, should be adjusted accordingly.

Origin of Issue	Comment	Expert Panel Response (November 22)
<b>2. Prawn harvest recovery (science stakeholder input)</b>  One scientist cast doubt over the assumption that prawn harvests can recover within 1.5 years of infestation in aquaculture and that mortality is not affected in wild prawns.	The Expert Panel Review (April 2021) noted:  “Some of the references in the Draft Report (see p 225) are quite old and or may not be relevant to Australia as overseas recoveries of harvest was through the farming of a species of prawn not native to Australia (see Diggle, 2018, p17). We suggest adjusting information on page 231 to indicate that resistance breeding may provide a long-term solution, but Australia would need to do its own breeding.”	<b>PARTIALLY ADDRESSED</b>  The original assumption appears in Chapter 14 of the Draft Report (2020) and the comment remains unchanged in the Provisional Final Report (see page 229).  The Expert Panel believes that the matter has been addressed, in part, in Chapter 1.5. where it is noted that five of the farms affected in the 2015/17 detection of white spot disease began production in 2020 with no white spot disease detected. The other two originally affected farms did detect White spot disease in 2020.  The Expert Panel recommends Chapter 14 be updated considering the information provided in Chapter 1.5, or the comment deleted in Chapter 14 to avoid confusion.
<b>3. Bait and berley pathway (industry stakeholder input)</b>  Some industry submissions contend that the bait and berley pathway is not properly assessed or understood.	The Expert Panel Review (April 21) noted:  “The Draft Report acknowledges that imported prawns and prawns intended for human consumption are widely used as bait or berley for recreational fishing, with ‘price and convenience’ a major driver. The Draft Report also acknowledges that the bait pathway risk has not been controlled with warning signs or education campaigns but contends that the tightening of biosecurity measures since 2017, along with several monitoring activities related to import	<b>PARTIALLY ADDRESSED</b>  Significant new information on the bait and berley pathway, including updated information and data from the recreational fishing survey is included throughout: <ul style="list-style-type: none"> <li>• Chapter 4 ‘Risk assessment methodology and summary of general considerations’,</li> <li>• Section 4.3.2 ‘Identification of exposure pathways’</li> <li>• Table 7 ‘Summary of Major and Minor Pathways for Imported Prawns’</li> <li>• Section 4.3.3 ‘Key considerations of the exposure assessment’</li> </ul>

Origin of Issue	Comment	Expert Panel Response (November 22)
	<p>conditions, are effective in achieving Australia's ALoP. To address industry concerns, further elaboration of the risk management measures that are in place to manage the bait and berley pathway would be helpful. The Draft Report should incorporate updated information and data from the recreational fishing survey if possible."</p>	<p>In Chapter 5 'Options for biosecurity management of imported prawns, Section 5.1 Biosecurity measures' considered further, several additional matters relevant to the various risk management options, including some changes to assumptions following incorporation of data from the recreational fishing survey, have been added.</p> <p>However, in some cases, it is not clear what adjustments the Department has made to its risk management approach. For example, the discussion on page 84 relating to cooked prawns gives the impression that there is less risk now because cooked prawns represent a higher proportion of bait and berley used by recreational fishers than previous data suggested. The first reference on page 84 becomes clearer only in the context of the risk assessment on page 237.</p> <p>The Expert Panel recommends that the Department check the wording on page 84, second paragraph to ensure clarity. The Department may wish to consider giving more context on page 84, or cross-reference page 237, or reword the entry on page 84.</p> <p>The Expert Panel also recommends that the Department clarify how this risk could be further lessened. Some text alludes to changes in labelling. Is there more that can be done? The Panel notes that other action may be under the jurisdiction of States or Territory Governments.</p>



Origin of Issue	Comment	Expert Panel Response (November 22)
<b>4. Entry assessment has a history of failure (industry stakeholder input)</b>  Many industry submissions are critical of the Draft Report's confidence in the effectiveness of testing at the border which has failed in the past due to inspection confusion, system sorting and testing failure. Some submissions suggest that inadequate resourcing is a major reason for failure, and one suggests that the resources needed to enforce import biosecurity protocols should be cost-recoverable.	The Expert Panel Review (April 21) noted:  "The Draft Report does not provide a clear explanation of how deficiencies in the testing regime will be addressed nor the resources that would be needed to strengthen the testing regime. The Draft Report should further consider the recommendations put forward by industry seeking a clearer outline of the testing regime for each of the prawn categories, the justification for the categories and trigger mechanisms for increased surveillance of each of the categories."	ADDRESSED with a SUGGESTION  (This issue is closely related to Issue 65 addressed above)  New Chapter 17 'Testing of imported prawns' contains a comprehensive description of the testing regime for uncooked prawns, including additional information on testing for WSSV and YHV1.  The Expert Panel suggests that the Department may wish to consider whether it would be worthwhile adding specific references to the other eight diseases in this chapter.
<b>5. Chapter 1, section 1.3, and Figure 1 (Provisional Final Report)</b>  Prawn catch data.	This is new material to the Provisional Final Report.  The Expert Panel notes that while the map in Figure 1 indicates that there is wild catch of prawns in South Australia, this is not mentioned in the text in section 1.3.	The Expert Panel recommends additional text to indicate South Australia has an annual wild catch of approximately 2,000 tons.
<b>6. Chapter 2 and Appendix F (Provisional Final Report)</b>	This is new material to the Provisional Final Report.  The Expert Panel notes that Table 25 in Appendix F provides a comprehensive view of the source information that underpins Table 1.	The Expert Panel suggests it may be of value to the reader to have a pointer to Table 25 in the text immediately above Table 1 (e.g. <i>see Table 25, Appendix F, for the risk assessment values for imported prawns for different biosecurity measures</i> ).

Origin of Issue	Comment	Expert Panel Response (November 22)
<b>7. Chapter 14, sections 14.4.3 and 14.4.4 (Provisional Final Report)</b>  Biosecurity measures for uncooked prawns with pre-import and on arrival batch testing (see page 237)	The Expert Panel notes that the overall restricted risk for uncooked prawns with head, shell removal and pre-border testing is 'moderate' but the introduction of on-arrival batch testing reduces the risk to 'very low'. The arguments for this large drop between the two categories was not clear. The third dot point in section 14.4.4 was confusing.	The Expert Panel recommends that the Department consider the wording of sections 14.4.3 and 14.4.4 to ensure clarity.
<b>8. Appendix B, issue 38 (Provisional Final Report)</b>  See page 297	The text reads <i>"Australian farmed prawns exported overseas for processing and re-imported should have import requirements similar to current import conditions for Australian prawns processed overseas in a departmental approved facility."</i>	QUERY  Should the reference be to 'Australian <u>wild</u> prawns processed overseas in a departmental approved facility'?

## Appendix 2: Expert panel biographies

### **Joanne Daly (Chair)**

BSc (Hons), PhD, PSM, FTSE, GAICD

Dr Joanne Daly is a consultant in agricultural sciences. She has extensive experience in research, research management and governance in the areas of agricultural sciences, evolutionary biology and biosecurity. She worked in CSIRO (1984-2015) where she held a range of senior and executive roles in entomology, agricultural and food sciences, and in national research collections. She has a PhD from the Australian National University (1979) in evolutionary biology.

Joanne has had extensive experience in biosecurity. She is a Director of Plant Health Australia (2015- ). In CSIRO, her portfolio of responsibility included strategic oversight of biosecurity research activities and facilities in both plants and animals (1994-2010). She has been a member of a range of government advisory bodies in agricultural biosecurity, including Biosecurity Advisory Council (2010-2013) and Quarantine and Export Advisory Committee (2005-2009). She is a member of the Advisory Committee on Chemical Scheduling for the Therapeutic Goods Administration (2019- ).

She was Chair of the Science Reference Panel for yellow canopy syndrome in sugarcane (2016-2020) for Sugar Research Australia and a Commissioner for the Australian Centre of Agricultural Research, ACIAR (2009-2015). She has had a number of roles in the use of online approaches to identification of species, biodiversity. She was Chair of the international Global Biodiversity Information Facility (2009-2013). Joanne chaired the 'Expert Working Group on Security Australia's Agricultural Future' for the Australian Council of Learned Academies, as a Fellow of ATSE.

### **Steve McCutcheon**

BEC, Grad Dip Public Law, GAICD

Steve has worked with the food and agriculture sectors for his entire career. From 1997 to 2007, he held senior leadership roles within the Australian Government Department of Agriculture relating to animal and plant health and food safety. In 2007, he was appointed Chief Executive Officer of Food Standards Australia New Zealand (FSANZ) and remained in that role until 2017. Throughout his 20 years in public sector leadership roles, he was a member and/or chair of national committees related to animal health, plant health and food safety and leader of Australian Government delegations to multilateral and regional consultations on food safety and food standards.

Steve is currently a Non-Executive Director and Chair of Plant Health Australia Limited, Non-Executive Director and Chair of Valmar Support Services Limited, Acting Chair of the FSANZ Board and a member of the Governing Board of the Joint Accreditation System of Australia

and New Zealand (JAS-ANZ). He has been a member of the Department of Agriculture, Fisheries and Forestry's Scientific Advisory Group since 2016.

#### **Will Zacharin CF**

BSc (Hons), MSc, Grad Dip Bus Mangt, GAICD

Will currently works as a private consultant specialising in the areas of fisheries and biosecurity. He spent 20 years as a Senior Executive with the Department of Primary Industries and Regions South Australia, with his last 9 years as the Executive Director, Biosecurity SA from 2010 to 2019, responsible for animal and plant pest and disease management. During this period, he was the South Australian Government representative on the National Biosecurity Committee. Will has also been involved in fisheries science and management throughout his public service career and was the Executive Director, Fisheries for a period of 10 years. In 2019, he was appointed a member of the Department of Agriculture, Fisheries and Forestry's Scientific Advisory Group. Will holds post graduate qualifications in science and business.