The Senate

Rural and Regional Affairs and Transport References Committee

Future of the beekeeping and pollination service industries in Australia

July 2014

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2.35 The committee recommends that the Government should, in consultation with relevant industry participants and with consideration to world's best practice, develop and establish a national honey bee colony survey scheme to collect reliable and comprehensive data about the industry and inform future decisions. The survey should include the establishment of a residue monitoring project to analyse pesticide residues in plant and bee media.

Recommendation 2

2.50 The committee recommends that the Government liaise with state and territory land management agencies to establish relevant guidelines to clarify access to public lands for beekeepers within the next 12 months.

Recommendation 3

2.64 The committee recommends that the Government ensure that beekeeping and pollination services are considered as an integral part of free trade agreement negotiations, and consider the impact current agreements have on the industry.

Recommendation 4

2.77 The committee recommends that AHBIC, Pollination Australia and the Commonwealth government enter into discussions about the best way forward to enable the pollination industry to make a contribution for pollination services to research and development, and to biosecurity.

Recommendation 5

3.22 The committee recommends the categorisation of *varroa destructor* be completed as a matter of urgency to provide industry with funding certainty in case of an incursion.

Recommendation 6

3.35 The committee recommends that the Commonwealth government confirm, and consider enlarging, its commitment to the National Bee Pest Surveillance Program.

Recommendation 7

3.36 The committee recommends that the Commonwealth government give urgent consideration to facilitating efforts by the industry to import suitable varroa-resistant breeding material into Australia, subject to stringent biosecurity safeguards being put in place.

Recommendation 8

3.56 The committee recommends the Department of Agriculture consult with relevant industry groups to ensure quarantine concerns are addressed, either as part of the proposed facility relocation or through the establishment of a specific bee-centric facility.

Recommendation 9

3.71 The committee recommends the Department of Agriculture, in consultation with industry groups, review the Import Risk Analysis for honey bee commodities, with a view to protecting the Australian industry and its 'clean, green' reputation.

Recommendation 10

3.74 The committee recommends that the Commonwealth government, in consultation with the AHBIC and other relevant stakeholders, investigate the viability and benefits of producing an annual industry report in the terms outlined in paragraph 3.73.

Chapter 1

Referral of the inquiry

1.1 On 12 December 2013, the Senate moved that the following matters be referred to the Rural and Regional Affairs and Transport References Committee (the committee) for inquiry and report by 26 March 2014:

> The future of the beekeeping and pollination service industries in Australia, with particular reference to:
>
> (a) the importance of these industries from a food security, environmental and financial point of view;
>
> (b) current challenges facing the beekeeping industry domestically and internationally, and its future sustainability;
>
> (c) the adequacy of the current biosecurity arrangements for imported and exported honey, apiary products, package bees and queen bees;
>
> (d) Australia's food labelling requirements, and how these affect the beekeeping industry;
>
> (e) the recommendations from the House Standing Committee on Primary Industries and Resources 2008 report More than Honey; the future of the Australian honey bee and pollination industries, and the Rural Affairs and Transport References Committee 2011 report Science underpinning the inability to eradicate the Asian honey bee; and
>
> (f) any related matters.[1]

1.2 On 12 February 2014, the Senate granted an extension of time for reporting until 19 June 2014.[2]

Conduct of the inquiry

1.3 The committee advertised the inquiry on its webpage and in *The Australian*. The committee received 79 public submissions which were published on the committee's website and are listed at Appendix 1.

1.4 The committee held public hearings in Murray Bridge, South Australia on 15 April 2014 and in Brisbane, Queensland on 20 May 2014. Appendix 2 lists the names and organisations of those who appeared. Details of the inquiry and associated documents including the Hansard transcripts of evidence may be accessed through the committee webpage.

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1 The Senate, *Journals of the Senate*, 12 December 2013, pp 364–365.

2 The Senate, *Journals of the Senate*, 12 February 2013, p. 444.

Definitions

1.5 Several different types of bees are discussed in the report therefore specific terminology is set out below:

- Asian honey bees (AHB), *Apis cerana*, are honey bees native to south-east and mainland Asia;[3]
- European honey bees (EHB), *Apis Mellifera*, are honey bees native to Europe that were introduced into Australia in the early 1800s;[4]
- Native bees are bees found in most of Australia's diverse habitats;[5] and
- Bumble bees, *Bombus terrestris*, presently only exist in Australia as a feral population in Tasmania.[6]

1.6 European honey bees in Australia are also referred to as being either *managed* (living in hives operated by humans) or as *feral* (living in the Australian environment without intervention, except for when they encounter humans). The term *wild bees* is also used to refer a combination of feral and native bees.

Related inquiries

1.7 The committee notes that there have been three previous parliamentary inquiries and another current inquiry on matters related to bees and pollination services. These inquiries are summarised below.

1.8 The House of Representatives Standing Committee on Agriculture, Fisheries and Forestry tabled its report on the inquiry into Rural Skills, Training and Research in February 2007. The report included recommendations that the Commonwealth government recognise the contribution of the beekeeping industry to Australian agriculture and horticulture by funding an entity such as a Cooperative Research Centre. The report also recommended that government guarantee the long term future of the honey bee quarantine facility currently housed in the Eastern Creek Quarantine Facility or make alternative arrangements for a permanent site.[7] Issues related to quarantine facilities for bees are discussed further in Chapter 3.

1.9 In June 2008 the House Standing Committee on Primary Industries and Resources tabled its report on the Inquiry into the Future Development of the Australian Honey Bee Industry, *More Than Honey: the future of the Australian honey*

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3 Plant Health Australia, *Asian Honey Bee Fact Sheet*, p. 1.

4 *European honey bee*, http://www.daff.qld.gov.au/animal-industries/bees/diseases-and-pests/asian-honey-bees/identifying-asian-honey-bees/european-honey-bee, (accessed 2 June 2014).

5 *Which Native Bees are in Your Area?*, http://www.aussiebee.com.au/beesinyourarea.html, (accessed 2 June 2014).

6 How to identify a bumblebee, http://www.aussiebee.com.au/bumblebeeid.html, (accessed 2 June 2014).

7 House of Representatives Standing Committee on Agriculture, Fisheries and Forestry, *Skills: Rural Australia's Need*, February 2007, p. 149.

bee and pollination industries (More Than Honey).[8] The report included 25 recommendations to improve the industry and secure its future sustainability.[9]

1.10 Several submitters to the current inquiry indicated that they were concerned that many of the More Than Honey recommendations had not been implemented[10] however the committee notes that progress has been made on some of the recommendations.

1.11 Recommendation 9, related to treating varroa mite, is discussed in Chapter 2 of this report. Research funding, the subject of recommendations 16 and 24, and recommendation 25 related to a pollination services levy, is discussed in Chapter 2. Chapter 3 discusses recommendation 11 related to quarantine facilities and recommendation 12, the Import Risk Analysis for varroa resistant bee semen. Food standards and labelling issues relating to More Than Honey recommendations 20 and 21 are discussed in Chapter 4.

1.12 The committee received evidence to indicate that the remaining thirteen More Than Honey recommendations that were supported by the government have been implemented to some extent.[11] Dr Doug Somerville provided the committee with a status report on implementation:

- a range of outcomes had been achieved for recommendations 2, 4, 8, 10, 13 and 14;
- aspects of recommendations 1, 3, 5, and 15 have been implemented with varying degrees of success; and
- recommendations 7, 22 and 23 covered matters for which responsibility rested solely or jointly with other jurisdictions.[12]

1.13 Recommendations that have been implemented either partially or fully and have been raised during the current inquiry are discussed in Chapter 2: chemical labelling (recommendation 4) and resource security (recommendations 5 and 7). Issues relating to recommendations 8, 10, 13, 14 and 23 are included in Chapter 3 on biosecurity.

1.14 The committee notes that recommendations 6, 9, 11, 12, 16–21, 24 and 25 of the More Than Honey report have not been implemented.[13] The committee is

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8 House of Representatives, *Votes and Proceedings,* No. 27, 16 June 2008, p. 374.

9 House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, May 2008, pp xvii–xxii.

10 Mr Stephen Targett, *Submission 19*, p. 11; Mr David & Mrs Wendy Mumford, *Submission 30*, p. 5; Capilano Honey, *Submission 39*, p. 7; Beechworth Honey Group, *Submission 52*, p. 14.

11 Government Response, House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, August 2009.

12 Dr Doug Somerville, *answer to question on notice,* 15 March 2014, (received 14 May 2014).

disappointed that such a large number of recommendations have not been implemented at all. The committee is also concerned that several important recommendations (made in the 2008 House of Representatives report) have been only partially implemented, or not implemented in a timely fashion. This has resulted in a situation where a number of expected improvements and benefits have not been delivered to Australia's beekeeping and pollination service industries.

1.15 In April 2011, the Senate Rural Affairs and Transport References Committee tabled an interim report on 'the science underpinning the technical assumption that the Asian honey bee, cannot be eradicated in Australia'.[14] The interim report contained recommendations to reconsider the question of whether the Asian honey bee is eradicable from Australia. The government response tabled in November 2011 noted that consensus was not reached on whether the AHB could be eradicated but indicated that a $2 million program would run from July 2011 to June 2013 to facilitate the transition from eradication to the ongoing management of Asian honey bees.[15] Issues related to this decision are discussed further in Chapter 2.

1.16 On 27 March 2014, the House of Representatives Agriculture and Industry Committee was asked to conduct an inquiry into country-of-origin labelling (CoOL) for food. The inquiry is intended to examine the effectiveness of country-of-origin labelling and has some relevance to the committee's fourth term of reference on Australia's food labelling requirements, and how these affect the beekeeping industry.

Structure of the Report

1.17 The committee considered a range of evidence covering the terms of reference for the inquiry. Chapter 2 covers the importance of beekeeping and pollination services from a food security, environmental and financial point of view, as well as current challenges experienced by the beekeeping industry. Chapter 3 covers biosecurity matters, and Australia's food labelling requirements in relation to honey are covered in Chapter 4.

Acknowledgements

1.18 The committee thanks organisations and individuals who made submissions and gave evidence at the public hearings.

Note on references

1.19 References to the Committee Hansard are to the proof Hansard. Page numbers may vary between the proof and the official Hansard.

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13 Government Response, House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, August 2009.

14 Senate Rural Affairs and Transport References Committee, *Interim Report: Science underpinning to inability to eradicate the Asian honey bee*, April 2011.

15 Government Response, Senate Rural Affairs and Transport References Committee, *Interim Report: Science underpinning to inability to eradicate the Asian honey bee*, April 2011, pp 1, 17.

Chapter 2

Background and current challenges

2.1 This chapter discusses the importance of the beekeeping and pollination service industries from a food security, environmental and financial point of view as well as the current challenges facing these industries.

Food security, environmental and financial importance of the beekeeping and pollination service industries

2.2 The committee considered a range of evidence relating to the importance of bees to food security and the corresponding financial impact this has.[1] Many submitters were keen to elevate the level of awareness among the public, policy makers, and food producers of the importance of bees and what may be lost if some of the threats to bees are realised.[2]

Importance for food security

2.3 The United Nations Committee on World Food Security describes food security as being 'when all people, at all times, have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.'[3]

2.4 Australia enjoys good food security generally and also has the capacity to export significant volumes of food and contribute to the food security of other nations. However this does not mean that Australia is not presented with threats to current food security, as noted by the Prime Minister's Science Engineering and Innovation Council in 2010:

> …if our population grows to 35–40 million and climate change constrains food production, we can expect to see years where we will import more food than we export. We are now facing a complex array of intersecting challenges which threaten the stability of our food production, consumption and trade…[4]

Importance of beekeeping and pollination services

2.5 The main way in which bees contribute to food security is through pollination of crops and plants. Pollination enables a plant to bear fruit and seeds. The pollination

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1 NSW Apiarists' Association, *Submission 58,* pp 5–8; Rural Industries Research and Development Corporation, *Submission 11,* p. 1; Capilano Honey Limited, *Submission 39,* p. 3; CSIRO, *Submission 48,* pp 5–6; Crop Pollination Association Inc., *Submission 14,* pp 2–3.

2 Mr Rod Yates, *Submission 12,* p. 7; Victorian Apiarists' Association Inc., *Submission 40,* p. 7; Mr Gary Montgomery, *Submission 43,* p. 3; Beechworth Honey Group, *Submission 52,* p. 2.

3 United Nations Committee on World Food Security, http://www.fao.org/cfs/cfs-home/en/, (accessed 27 March 2014).

4 The Prime Minister's Science, Engineering and Innovation Council, *Australia and Food Security in a Changing World,* 2010, p. 1.

process involves the transfer of pollen, from the male part of a plant (in flowers, this is the 'stamen') to the female part of the plant (the 'carpel').[5] Pollination is important for many fruit, nut, vegetable, legume and seed crops. Insects that contribute to pollination by transferring pollen include bees, butterflies, moths and flies[6] with the honey bee the most frequent visitor to many crop species.[7] These bees include feral bees and managed bees which either intentionally or coincidently pollinate crops.

2.6 The Food and Agriculture Organisation of the United Nations (FAO) estimates:

> …that out of some 100 crop species which provide 90% of food worldwide, 71 of these are bee-pollinated. In Europe alone, 84% of the 264 crop species are animal pollinated and 4 000 vegetable varieties exist thanks to pollination by bees. The production value of one tonne of pollinator-dependent crop is approximately five times higher than one of those crop categories that do not depend on insects.[8]

2.7 The contribution of bees and other pollinators to pollination depends on the type of crop. In addition to increasing the yield, pollinators can also increase the quality of many crops and reduce agricultural inputs, such as water and time. Pollination also has significant benefits for animal feed:

> Pollination can also impact the animal production sector because of the importance of insect pollinated crops as fodder. Legumes, such as clovers, are important as a dietary nitrogen source for livestock, and many legumes benefit from insect pollination. Bee pollination can influence the persistence of clover in pasture, therefore affecting grazing quality.[9]

2.8 The yield of some crops can be increased by up to a factor of four with efficient pollination. As a result, the environmental benefits are associated with reductions in the required agricultural inputs, such as water, soil, chemicals, and preparation of land.[10]

Financial importance

2.9 The financial importance of beekeeping can be considered in two parts. One part is the direct products from the bee keeping industry, including honey, wax and other hive products. In 2010 the global production of honey was 1.54 million metric tons. In 2011, global imports of honey accounted for 0.38 million metric tons

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5 *The plant pollination process,* http://www.buzzaboutbees.net/plant-pollination-process.html, (accessed 2 June 2014).

6 United Nations Environment Programme, *Global Honey Bee Colony Disorders and other Threats to Insect Pollinators,* 2010, pp 1–2.

7 CSIRO, *Submission 48,* p. 6.

8 United Nations Environment Programme, *Global Honey Bee Colony Disorders and other Threats to Insect Pollinators,* 2010, p. 1.

9 CSIRO, *Submission 48,* p. 5.

10 Crop Pollination Association Inc., *Submission 14,* p. 3.

with a value of US$1.2 billion.[11] The second part is related to crop pollination by bees which has a greater financial output than direct bee products:

> The contribution of pollinators to the production of crops used directly for human food has been estimated at €153 billion globally, which is about 9.5% of the total value of human food production worldwide.
>
> It is problematic to estimate the global economic value of the pollination services provided by managed species, as it is difficult to know if crops have been pollinated by managed or wild individuals. Nevertheless, recent estimates range between €22.8 to 57 billion, including apiculture markets and particularly all cash-crop yields.[12]

2.10 The demand for pollination services has risen by over 300 per cent in 50 years. This suggests that economic globalisation, rather than biological factors, drives the dynamics of both the global managed honey bee population and the demand for agricultural pollination services.[13]

2.11 In Australia the honey bee industry includes 12 250 registered beekeepers operating 524 000 hives. Approximately 340 000 of these hives are managed by about 1650 commercial beekeepers. Australia's annual production of honey typically varies between 20 000 and 25 000 tonnes. Annual honey yields per hive in Australia are among the highest in the world, due to the relatively large amounts of nectar produced by Australia's native flora and the tendency of the Australian honey bee industry to focus on honey production rather than pollination services.[14]

2.12 Honey and other hive products generate $70 – 90 million a year in Australia.[15] Financial estimates for the contribution to crop production by pollination services included a commonly quoted figure of $4–6 billion per annum,[16] however the Department of Agriculture cited a 2003 estimate of $0.6 – 1.7 billion.[17] A number of submitters and witnesses identified increasing demand for honey locally and for

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11 US AID Capacity to Improve Agriculture and Food Security, *The world market for honey*, September 2012, pp 1–2, http://www.fintrac.com/cpanelx_pu/Ethiopia%20CIAFS/12_06_4949_CIAFS%20_1%20Honey%20Final%20Oct%2011.pdf, (accessed 31 March 2014).

12 United Nations Environment Programme, *Global Honey Bee Colony Disorders and other Threats to Insect Pollinators*, 2010, p. 2.

13 M. A. Aizen and L. D. Harder, *Current Biology 19*, 9 June 2009, pp 915–918.

14 Department of Agriculture, *Submission 79*, pp 1–2.

15 Department of Agriculture, *Submission 79*, p. 2.

16 House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, May 2008, p. 1.

17 Department of Agriculture, *Submission 79*, p. 4.

export, and pollination services due to the expansion of pollination dependent crops such as almonds.[18]

2.13 The majority of plants (measured by volume) produced for human consumption and animal feed in Australia are crops such as wheat, barley and rice, which self-pollinate. In contrast, 65 per cent of horticultural and agricultural crops (measured by number) introduced into Australia since European settlement, require honey bees for pollination.[19] The dependence on honey bee pollination of a range of crops is shown in Appendix 3.

2.14 The CSIRO provided some examples of high value crops which rely on managed pollination to varying degrees. The Australian almond and apple industries, worth $331 million and $464 million per annum respectively, are 100 per cent dependent on bees for pollination. In contrast, canola is a crop that is worth $1.8 billion to the Australian economy and is routinely grown without managed pollinators, but a better yield is produced when pollinators are provided.[20]

2.15 The honey bee industry also offers downstream benefits to other industries in the supply chain[21] with food manufacturing reliant on the availability of ingredients such as:

- honey or honey derived products;
- plant food products (e.g. fruits, vegetables, nuts) which rely on the pollination services of the honey industry to maintain production from season to season; and
- dairy, meat and protein products derived from grazing farm animals foraging on introduced pasture grasses (e.g. clover, legumes, lucerne) reliant on honey bees for pollination. [22]

2.16 The committee is also aware of arguments that there are gaps in understanding how well feral and managed honey bees contribute to crop pollination in Australia, due to inconclusive data and a lack of Australian specific data:

> Apart from a relatively small number of highly pollination-responsive and specialist industries, such as almonds and seed crops where pollination is well managed, it is likely that the importance of insect pollination is not

18 Dr Benjamin McKee, *Committee Hansard*, 20 May 2014, p. 48; Australian Honey bee Industry Council Inc., *Submission 63*, p. 4; NSW Apiarists' Association, *Submission 58*, pp 5–8; Mr Warren Jones, Jones's Honey Comb Australia, *Submission 45*, p. 1.

19 CropLife Australia, *Submission 54*, p. 1.

20 CSIRO, *Submission 48*, p. 5.

21 Australian Food and Grocery Council, *Submission 51*, p. 4; Wheen Bee Foundation Ltd, *Submission 65*, p. 9.

22 Australian Food and Grocery Council, *Submission 51*, p. 4.

fully appreciated and as a result is not optimally managed by the majority of producers.[23]

Committee view

2.17 Evidence considered by the committee indicates that there is potential for bees to be used as pollinators to deliver an even greater yield for some crops. The committee considers that honey and other hive products form a small but important part of Australia's agricultural production, and notes the growing importance of pollination services that honey bees perform, including the ability to increase productivity and crop yield.

2.18 The committee also notes that, as recently as 20 June 2014, US President Barack Obama issued a memorandum directing US government agencies to take further steps to protect and restore these industries because of their critical contribution to the economy and environment. This action includes:

- The Department of Interior and United States Department of Agriculture (USDA) joining 45 state governors in issuing Pollinator Week Proclamations, publicly acknowledging the vital services that pollinators provide;
- The Environment Protection Agency releasing guidance designed to help scientists accurately assess the potential risks that different pesticides may pose to bees; and
- As part of its Conservation Reserve Program, the USDA has announcing an $8 million initiative to provide funding to farmers and ranchers who will establish new pollinator habitats on agricultural lands.[24]

Current challenges facing the beekeeping industry and its future sustainability

2.19 The section below discusses the current challenges facing the Australian beekeeping industry.

Effect of chemical use on bees

2.20 Managed, feral and wild bees are exposed to a number of chemicals found in pesticides and herbicides that are used in agriculture, horticulture, and apiculture.[25] When used alone these chemicals can affect honey bees, however their combined toxicity may be even more harmful.[26]

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23 Rural Industries Research and Development Corporation, *Pollination Aware: The Real Value of Pollination in Australia,* August 2010, p. vii.

24 White House blog, online: http://www.whitehouse.gov/blog/2014/06/20/new-steps-protect-pollinators-critical-contributors-our-nation-s-economy.

25 Agriculture is a general term to refer to the deliberate cultivation of crops as well as animal farming, usually on extensive pieces of land on a large scale. Horticulture refers to plant cultivation only, and apiculture is a technical term for beekeeping.

26 NSW Apiarists' Association, *Submission 58*, p. 19.

2.21 Chemical companies wishing to register a product for sale and use in Australia are required to provide data to the Australian Pesticides and Veterinary Medicines Authority (APVMA) supporting the safety and efficacy of the product.[27] Once approved for use, the APVMA manages the registration of pesticides under Commonwealth legislation, and state and territory legislation regulates the use of those registered pesticides.

2.22 The Commonwealth *Agricultural and Veterinary Chemicals (Code) Act 1994* controls the import or manufacture of pesticides, their packaging, registration, labelling, wholesale supply, and retail supply to the end user.[28] States and territories regulate the post retail sale, transport, storage, use and disposal of pesticides once they are in the possession of the end user.[29]

2.23 Concerns were raised with the committee that data provided to the APVMA in support of chemical registration is not independently verified, nor are tests conducted to assess the effect of prolonged exposure of these chemicals on native bees and honey bees. [30]

Neonicotinoid Pesticides

2.24 Several submitters raised concerns about the use of neonicotinoid pesticides (neonics), which have been accused of contributing to the decline of honey bee populations in Europe and the United States of America.[31] However, neonics remain widely in use in Australia. Neonics were first used in the 1990s and designed to be systemic insecticides, meaning crop seeds are sprayed before planting. As the seed grows, intake of the chemical occurs, making the plant itself toxic to insects and providing protection from pests throughout the entire growth cycle and season.[32]

2.25 Some submitters observed that research conducted in the United Kingdom indicates that neonics ingested by bees can seriously impact their ability to collect food, even at very low levels of contamination.[33] However, this research has been

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27 Department of Agriculture, *The National Registration Scheme*, http://www.daff.gov.au/agriculture-food/ag-vet-chemicals/regulation, (accessed 27 May 2014).

28 Australasian Legal Information Institute, *Agricultural and Veterinary Chemicals Code Act 1994*, http://www.austlii.edu.au/au/legis/cth/consol_act/aavcca1994382/sch1.html, (accessed 3 April 2014).

29 Department of Health Western Australia, *A guide to the use of pesticides in Western Australia*, 2010, p. 10.

30 Crop Pollination Association Inc (Vic), *Submission 14*, p. 5; Mr Warren Jones, *Submission 45*, p. 1; Victorian Apiarists' Association Inc, *Submission 40*, p. 4.

31 Neonicotinoid pesticides are a class of relatively new, neuro-active insecticides chemically similar to nicotine which affect the central nervous system of insects, which can result in paralysis and death.

32 The Xerces Society for Invertebrate Conservation, *Are Neonicotinoids Killing Bees?*, 2012, p. 3.

33 AUSVEG, *Submission 74*, p. 5.

questioned by chemical manufacturers and bee researchers on the basis that research conditions did not accurately replicate in-field conditions.[34]

2.26 The Tasmanian Farmers and Graziers' Association contends that APVMA data requirements for testing of insecticides are not adequate to properly consider possible routes and the extent of exposure of insect pollinators to pesticides or to assess the potential for adverse effects of pesticides on honey bees and other insect pollinators. On this basis the current testing system may not take account of the impact of neonics on pollinators.[35]

2.27 In support of this point, Ms Manu Saunders advised the committee that research has found that honey bees simultaneously exposed to an immune challenge and a dietary toxin, as found in neonicotinoid pesticides, died sooner than honey bees exposed to only one of the stressors alone.[36]

2.28 Crop Pollination Association Inc (Vic) suggest that there have been no independent long term studies on the effects of systemic pesticides on soil, water or bees. They also suggest that batch mixing of chemicals can be performed by farmers, which can increase the efficacy of these chemicals against insects and may kill bees at far lower dosage rates.[37]

2.29 The committee notes that there are international examples of restrictions on the use of neonics. From 2013, the European Commission suspended the use of neonics on flowering crops such as corn, canola, sunflowers and cotton for two years. The suspension restricts the use of three neonicotinoids for seed treatment, soil application and foliar treatment on bee attractive plants but does not apply to crops that are not attractive to bees.[38]

2.30 In March 2013, the United States Center for Food Safety, environmental groups, and beekeepers initiated legal action against the United States Environmental Protection Agency (USEPA) on the basis that the USEPA should have prevented the registration of two neonicotinoid pesticides alleged to be harmful.[39] The USEPA

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34 AUSVEG, *Submission 74*, p. 5.

35 Tasmanian Farmers & Graziers Association, *Submission 70*, p. 6.

36 Ms Manu Saunders, *Submission 3*, p. 3.

37 Crop Pollination Association Inc (Vic), *Submission 14*, p. 4.

38 European Union, *European Commission Press Release: Bees & Pesticides: Commission to proceed with plan to better protect bees*, http://europa.eu/rapid/press-release_IP-13-379_en.htm?locale=en, (accessed 20 January 2014).

39 Center for Food Safety, *Press Release: CFS, Beekeepers and Public Interest Groups Sue EPA Over Bee-Toxic Pesticides*, http://www.centerforfoodsafety.org/press-releases/1911/cfs-beekeepers-and-public-interest-groups-sue-epa-over-bee-toxic-pesticides, (accessed 3 March 2014).

accelerated the schedule for registration review of the neonicotinoid pesticides but has indicated the review will not be completed before 2018.[40]

2.31 The APVMA released a report in 2014, *Overview Report: Neonicotinoids and the Health of Honey Bees* (Overview Report), which noted that neonicotinoids offer a range of benefits when compared with older organophosphate and carbamate insecticides they have mostly replaced. The report advised that '…the scientific literature shows there is lack of consensus on the causes of honey bee declines, with a wide range of possible causes being actively investigated'.[41]

2.32 In the Overview Report the APVMA identified that Australia, unlike its German, British, Italian and United States counterparts, lacked a national honey bee colony survey scheme, and recommended trialling nationwide annual surveys of beekeepers about the health of their hives to be collated into a national report. A number of submitters support this concept, calling for an annual industry report to provide data on financial and physical industry production, trends and issues.[42]

2.33 The APVMA's Overview Report also noted Australia's lack of residue monitoring and suggested a similar project be established to analyse pesticide residues in various plant and bee media.[43]

Committee view

2.34 The committee considers that the Commonwealth could, in consultation with relevant industry participants, investigate the viability and benefits of establishing a national honey bee colony survey scheme with a view to collecting reliable data that monitors the long term health of the industry, as discussed above. Consideration could also be given to establishing a residue monitoring project to analyse pesticide residues in various plant and bee media, as recommended by the APVMA in its Overview Report, also discussed above.

Recommendation 1

2.35 The committee recommends that the Government should, in consultation with relevant industry participants and with consideration to world's best practice, develop and establish a national honey bee colony survey scheme to collect reliable and comprehensive data about the industry and inform future decisions. The survey should include the establishment of a residue monitoring project to analyse pesticide residues in plant and bee media.

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40 The Guardian, *US government sued over use of pesticides linked to bee harm*, http://www.theguardian.com/environment/2013/mar/22/us-government-sued-pesticides-bee-harm, (accessed 4 June 2014).

41 APVMA, *Overview Report: Neonicotinoids and the Health of Honey Bees in Australia*, February 2014, pp 2–3.

42 Beechworth Honey Group, *Submission 52*, p. 8; Wheen Bee Foundation Ltd, *Submission 65*, p. 4; and Mr Dave Elson, *Submission 76*, p. 6.

43 APVMA, *Overview Report: Neonicotinoids and the Health of Honey Bees in Australia*, February 2014, pp 62–63.

Spray drift from chemical application

2.36 Another issue of concern raised with the committee during the inquiry is that of spray drift from the application of chemicals to crops. Spray application involves the use of spray equipment to distribute pesticides to crops in the form of active liquid ingredients at certain concentrations.[44] Pesticides applied as a spray of liquid droplets or as a fine dust can be carried by wind outside the intended area either during or after application.[45] As temperatures increase and the air becomes drier, increased evaporation allows droplets to remain airborne longer and may travel further than intended.[46]

2.37 According to the NSW Apiarists' Association, there have been a number of incidents where beekeepers have lost hives due to direct spraying or spray drift.[47] Mr Terry Brown advised the committee that bees in 120 of his hives died while being transported on the back of a truck after experiencing spray drift from a pesticide being applied to a cotton crop.[48] Mr Warren Jones provided another example of how spray drift may have impacted on bees:

> Several beekeepers working river gum sites on the Macquarie River at Warren and Gin Gin suffered severe bee losses due to cotton spray 'drift' on to hives. The cotton crops are seed treated with a neonicotinoid at planting which is highly systemic. The cotton plants were then sprayed with Fipronil and Phenyl pyrazole which are also highly systemic. I suspect that there was a high probability that the two chemicals have combined within the cotton plants to provide a perfect storm for a major loss of bees to all the beekeepers involved. The EPA and APVMA need to start somewhere with independent evaluation.[49]

2.38 To address these concerns, Mr Stephen Targett suggested the implementation of 'no-spray zones' around beehives.[50]

Chemical labelling

2.39 The committee heard evidence that some beekeepers believe that inappropriate use of chemicals and unclear labelling of chemical products is having an impact on bees, and contributing to bee deaths.[51] David and Wendy Mumford suggest that the quality of information on chemical labels should be improved, and that

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44 Queensland Government Department of Primary Industries and Fisheries, *Agricultural chemical users' manual*, p. 50.

45 APVMA, *Operating principles in relation to spray drift risk*, July 2008, p. 4.

46 Queensland Government Department of Primary Industries and Fisheries, *Agricultural chemical users' manual*, p. 56.

47 NSW Apiarists' Association, *Submission 58*, p. 19.

48 Mr Terry Brown, *Submission 57*, p. 2.

49 Mr Warren Jones, *Submission 45*, p. 1.

50 Mr Stephen Targett, *Submission 19*, p. 8.

51 Mr Stephen Targett, *Submission 19*, p. 9.

legislation be amended to regulate the inappropriate use of chemicals that are used contrary to their labelling instructions.[52]

2.40 The committee notes that this issue was considered in the More Than Honey report and that the government response agreed with recommendation 4 of that report which called for clearer labelling of chemicals to reduce the possible impact on bees. The committee also notes that the APVMA has been progressing work in relation to pesticide use generally, discussed above at paragraphs 2.31 to 2.33.

2.41 During its public hearing in Murray Bridge, South Australia, the committee heard that there was support for introducing penalties for chemicals used contrary to labelling (referred to as 'off-chemical use'):

> If a particular chemical is dangerous to bees or beneficial insects that should be clear—'Do not spray while bees are foraging' and back that up. I think there should be warnings that fines could apply if you use this off-label procedure, because most of the bee kills are from off-label use.[53]

2.42 The Department of Agriculture advised the committee that it is progressing work to improve labelling of chemicals that may impact on bee health. In 2012, as part of a detailed investigation of the neonicotinoid insecticides the APVMA contracted the Australian Environment Agency Pty Ltd to:

> …look at the labels of those Australian products which carry bee protection statements and review the consistency or inconsistency of the wording in those statements; and
>
> …advise the APVMA if changes need to be made to standard statements and to existing labels.[54]

2.43 This investigation noted the wide variety of bee protection statements on labels and that bee protection statements are not consistently applied to registered insecticide products. The Department of Agriculture advised the committee that recommendations were considered at an APVMA workshop for regulatory stakeholders on 24 July 2013, and these outcomes and recommendations are currently being considered by the APVMA and the Department of Agriculture.[55]

Committee view

2.44 The committee will monitor the response to these outcomes and recommendations by the APVMA and the Department of Agriculture, and will follow developments in this area. The committee looks forward to being advised of this information by the relevant agencies when it becomes available.

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52 Mr David and Ms Wendy Mumford, *Submission 30*, p. 3.

53 Mr Trevor Monson, *Committee Hansard*, 15 April 2014, p. 49.

54 Department of Agriculture, *Submission 79*, p. 17.

55 Department of Agriculture, *Submission 79*, p. 17.

Access to floral resources

2.45 During the inquiry the committee encountered a high degree of concern regarding the security of access to floral resources on public land,[56] with a number of submitters advising that there was confusion amongst beekeepers about the access available between the states and territories. Mr Benjamin Hooper of the South Australian Apiarists Association Incorporated explained the problem:

> National parks are the typical ones, the biggest parks and so forth in this state that we rely on, but there are other land tenures. It is confusing to the average beekeeper as to who controls those titles. For instance, we have a memorandum of understanding with SA Water. However, a single land manager can take control and he can individually say that he does not want bees in that area, even though we have an understanding with the peak authority. It is just that it can be undermined so easily.[57]

2.46 Mr Ian Zadow called for clarification of procedures for access to public land for beekeepers[58] and Mr Dan Heard suggested that the Victorian government policy, *Apiculture (beekeeping) on public land standard operating procedure*, was a good model that could be used by other states and territories to assist with clarification about access to resources. This was seen as a strategy to reduce confusion.[59]

2.47 The committee notes that this issue was considered in the More Than Honey inquiry, with recommendation 5 of that report recommending that the Commonwealth, in conjunction with state and territory governments, establish guidelines for access to public and leasehold lands, including national parks, with a view to securing access to floral resources for the relevant industries.[60]

2.48 The Department of Agriculture advised the committee that the Commonwealth has raised these matters with state and territory governments through a discussion with state and territory agriculture agencies at a Primary Industry Standing Committee meeting on 11 September 2008.[61]

Committee view

2.49 While the committee notes that the Commonwealth has raised this issue with states and territories, it considers more could be done to address confusion and

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56 Dr Doug Somerville, *Submission 28*, p. 1; Mr Robert Johnstone, *Submission 36*, p. 3; Capilano Honey Ltd, *Submission 39*, p. 5; Central Victorian Apiarists Association Inc, *Submission 53*, p. 3; NSW Apiarists' Association, *Submission 58*, p. 12; Wheen Bee Foundation Ltd, *Submission 65*, p. 4; National Farmers' Federation, *Submission 66*, p. 6; Mr Kevin MacGibbon, *Submission 69*, p. 3; and Mr Dave Elson, *Submission 76*, p. 4.

57 Mr Benjamin Hooper, *Committee Hansard*, 15 April 2014, p. 1.

58 Mr Ian Zadow, AHBIC, *Committee Hansard*, 15 April 2014, pp 32–33.

59 Mr Dan Heard, *Submission 9*, p. 1.

60 House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, May 2008, p. xviii.

61 Department of Agriculture, *Submission 79*, p. 17.

improve communication between beekeepers and relevant state and territory agencies. The committee also notes that access issues vary between states and territories. Evidence presented to the committee indicates that there is still a high degree of concern and confusion about access to floral resources and the committee reiterates the More Than Honey report recommendation that in states and territories which do not have them, guidelines be developed to clarify access to floral resources.

Recommendation 2

2.50 The committee recommends that the Government liaise with state and territory land management agencies to establish relevant guidelines to clarify access to public lands for beekeepers within the next 12 months.

Forest and Fire Management

2.51 As beekeepers are reliant upon the natural environment to farm their bees, the committee was advised that forest and fire management practices can affect their success. Several submissions indicated that fire management issues are affecting the beekeeping industry, as some controlled burning programs do not take the requirements of beekeepers into consideration.[62]

2.52 The committee heard that controlled burning programs may lead to the loss of floral resources and biodiversity,[63] possibly rendering bee sites unusable for decades.[64] Crop Pollination Australia Inc suggests that fuel reduction burns are commonly planned to occur in spring which distorts the plant species within the forest or scrubland and reduces biodiversity.

> Lack of biodiversity in the forest or scrubland is to the detriment of honey bees as well as native bees and marsupials. Different plant species will survive a spring burn to those of an autumn burn. Spring germinators are designed to survive a hot dry summer whereas autumn germinators are designed to survive frosty wet winters and are then established enough to survive a hot dry summer. Fire management of natural resources should alternate between spring and autumn burns.[65]

2.53 A number of submitters recommended burning programs be reassessed, in collaboration with the beekeeping industry. They also supported more research into the effectiveness of current fire practices, and the impacts on both native forest

62 Mr Jonathan Williams, *Submission 33*, p. 1; Capilano Honey Ltd, *Submission 39*, p. 4; Victorian Apiarists' Association Inc, *Submission 40*, p. 4; Central Victorian Apiarists Association Inc, *Submission 53*, p. 5.

63 Capilano Honey Ltd, *Submission 39*, p. 4; Central Victorian Apiarists Association Inc, *Submission 53*, p. 5; Wheen Bee Foundation Ltd, *Submission 65*, p .13; and Mr Moss MacGibbon and Mr Andrew McCallum, *Submission 67*, p. 3.

64 Capilano Honey Ltd, *Submission 39*, p. 4.

65 Crop Pollination Association Inc (Vic), *Submission 14*, p. 5.

biodiversity and honey bee industry, with a view to establishing honey bee friendly and sustainable environmental practices.[66]

2.54 The VFF State Beekeeping Branch suggested that beekeepers would be willing to participate in integrated fuel reduction planning, to help reduce the risk of their honey crops being compromised if burning occurs around or during flowering season.[67]

2.55 The committee notes that recommendation 7 of the More Than Honey report recommended that the Commonwealth government fund research into fire management practices that are more appropriate to the honey bee industry. The Department of Agriculture in its submission to the current inquiry, stated that as fire management is primarily the responsibility of state and territory authorities, this issue had been raised with relevant state and territory agencies during the meeting where access to floral resources was discussed,[68] referred to earlier at paragraphs 2.45 to 2.48.

Committee view

2.56 While the committee notes that the Commonwealth has raised this issue with states and territories it considers more could be done to consider the impact of fire management practices on the beekeeping industry. The committee encourages the Commonwealth government to liaise with states and territories to encourage integrated fire management practices which consider the needs of the beekeeping industry.

Clear Fell Harvesting

2.57 It was put to the committee that clear fell harvesting within the forestry industry and a gradual encroachment of clear fell[69] harvesting across licenced bee sites is depreciating native forest floral resources.[70] A number of submitters expressed concern that clear felling is also affecting natural resource security.[71]

2.58 The Victorian Apiarists' Association expressed concern about the security of lower elevation mixed species forests that provide critical summer and autumn pollens in preparation for winter pollination tasks:

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66 Mr Jonathon Williams, *Submission 33,* p. 1; Mr NJ & KD Fewster, *Submission 46,* p. 5; Wheen Bee Foundation Ltd, *Submission 65,* p .4; VVA Inc, *Submission 4,* p. 4; VVA Inc, *Submission 4*, p. 4; and VFF State Beekeeping Branch, *Submission 75*, p. 5.

67 VFF State Beekeeping Branch, *Submission 75*, p. 5.

68 Department of Agriculture, *Submission 79*, p. 17.

69 The Forest Practices Code defines clear felling as 'felling of all or nearly all the trees from a specific area in one operation'.

70 Victorian Apiarists' Association Inc, *Submission 40,* p. 33.

71 Mr NJ & KD Fewster, *Submission 46*, p. 5; Central Victorian Apiarists Association Inc, *Submission 53,* p. 4; Wheen Bee Foundation Ltd, *Submission 65*, p. 13; Mr Moss MacGibbon and Mr Andrew McCallum, *Submission 67*, p. 3; and VFF State Beekeeping Branch, *Submission 75,* p. 4.

> If the current rates of clear fell/ seed tree harvesting continue the Honey bee industry stands to lose a significant proportion of its available native forest resource over the next forty years…Having lost the mature forests that are harvested, studies have reported…species either fail to regenerate at all or a single opportunistic species favoured by the disturbance of a total loss of canopy cover, dominates the regeneration thereby diminishing the biological diversity and richness of the forest.[72]

Committee view

2.59 The committee considers that harvesting areas which overlay bee sites could be reviewed, and encourages state and territory land management authorities to consider this as part of their responsibilities in this area.

International challenges

2.60 While the terms of reference of the inquiry include international challenges facing the beekeeping industry, the committee was presented with little evidence in relation to this issue. One issue that was raised is that of bilateral and multilateral trade agreements and the possibility that honey, hive products and live bees are being excluded from trade agreements.

2.61 Honey exported from Australia can be subject to charges imposed by importing countries; yet according to the AHBIC, Australia does not impose tariffs on honey being imported from those countries or any other country.[73] The AHBIC's submission states that some typical tariffs Australian honey exporters are subject to include the European Union (17.3 percent), South Korea (253 percent), Japan (over 25 percent), China (15 percent) and India (60 percent).[74] In comparison, the Superbee Honey Factory advised the committee that New Zealand does not allow honey to be imported, in an effort to support their domestic industry and improve biosecurity.[75]

2.62 Capilano Honey Ltd observed that the recent Australia-South Korea Free Trade Agreement excluded honey '…which was very disappointing for industry considering the vast range of agricultural products included.'[76]

Committee view

2.63 While the committee did not receive a substantial amount of information relating to international and trade issues, the matter still deserves some discussion. The fact that honey and related products has not been considered in free trade agreement negotiations points to a lack of understanding or acknowledgement from

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72 Victorian Apiarists' Association Inc, *Submission 40*, p. 5.

73 AHBIC, *Submission 63*, p. 8; Apple and Pear Australia Limited, *Submission 24*, p. 3; Mr Gary Montgomery, *Submission 43*, p. 3; NSW Apiarists' Association, *Submission 58*, p. 4; Beechworth Honey Group, *Submission 52*, p. 6; Mr Warren Jones, *Submission 45*, p. 5.

74 Australian Honey Bee Industry Council Inc, *Submission 63*, p. 8.

75 Superbee Honey Factory, *Submission 6*, p. 1.

76 Capilano Honey Ltd, *Submission 39*, p. 5.

Government on how vital beekeeping and pollination services are to the agricultural sector.

Recommendation 3

2.64 The committee recommends that the Government ensure that beekeeping and pollination services are considered as an integral part of free trade agreement negotiations, and consider the impact current agreements have on the industry.

An ageing workforce

2.65 One issue raised is that of an ageing workforce. The committee heard that there are few young people entering the profession and that there are limited opportunities for training and career development.[77] The committee notes the existence of a single, nationally recognised course offered in Australia through Vocational Education and Training.[78] The committee heard that while this is considered a comprehensive course, it could be strengthened as it lacks modules on biosecurity, marketing, business management and communication.[79]

2.66 To overcome a future shortfall of professional beekeepers, several submitters suggested that apprenticeship programs be made available to the beekeeping industry.[80]

The committee notes that the issue of an ageing workforce and the lack of formal pathways into the industry was discussed in the More Than Honey report.[81] However, the committee does not consider that it has been presented with sufficient evidence on this issue in order to make a clear recommendation. The committee notes, however, that a comprehensive approach to supporting the industry and recognising its importance on the part of government would help it to be seen as a valid career choice.

State apiculture staff

2.67 The committee heard that there are concerns about low numbers of state and territory government apiculture staff available to maintain biosecurity through inspections, uphold best management practice, enforce regulation and offer advice in

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77 NSW Apiarists' Association, *Submission 58*, p. 4.

78 Department of Industry, *My Skills*, http://www.myskills.gov.au/courses/details?Code=AHC32010, (accessed 19 May 2014).

79 Wheen Bee Foundation Ltd, *Submission 65*, p. 12; NSW Apiarists Association, *Submission 68*, p. 16.

80 Wheen Bee Foundation Ltd, *Submission 65*, p. 4; Mr Gary Montgomery *Submission* 43, p. 3.

81 House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, May 2008, pp 180–201.

the field. It was put to the committee that current staff numbers are insufficient[82] for the scope of work,[83] as they may be engaged on a part time basis with little time for field work.[84]

2.68 Spurge Apiaries explained:

> Due to funding cuts and the size of the industry in WA we no longer have Stock Inspectors in the field monitoring bad practises. The Apiculture Section within AgWA now only has a staff of two and is largely irrelevant to the wider industry. Should an outbreak of Varroa occur in WA resources would be severely tested.[85]

2.69 The AHBIC website states that apiary officers are allocated to states and territories in the following way: three officers in New South Wales and Victoria; four officers in Queensland; and one officer in each of South Australia, Western Australia, Tasmania and the Northern Territory.[86]

Honey production levy

2.70 The Australian beekeeping industry currently pays a compulsory levy on honey production, which is used for research and development, and biosecurity. The honey levy and export charge funds the Honeybee Research and Development Committee of the Rural Industries Research and Development Corporation (RIRDC) and National Residue Survey testing of honey, with a small portion contributing to the Animal Health Australia Emergency Animal Disease Response Fund.[87] The committee heard that there is strong support for relevant research activities to be expanded.[88] The levy is administered by AHBIC and authorised under the same legislative framework which supports Australia's primary industries levies system; the

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82 Mr David and Mrs Wendy Mumford, *Submission* 30, p. 3; Victorian Apiarists' Association Inc Melbourne Section, *Submission* 61, p. 10; Lucerne Australia, *Submission 13*, p. 2; Mr Leo Kuter, *Submission 26*, p. 3; South Australian Apiarists' Association Inc, *Submission* 4, p. 2; Mr David Severino, *Submission* 59, p. 5.

83 Mr Leo Kuter, *Submission 26*, p. 3.

84 Mr David Severino, *Submission 59*, p. 5.

85 Mr Ken and Mr Mike Spurge, *Submission* 68, p. 3.

86 AHBIC, *Our Relationships*, http://honeybee.org.au/organisation/our-relationships/, (accessed 29 May 2014).

87 Department of Agriculture, *Honey Levy Information*, http://www.daff.gov.au/__data/assets/pdf_file/0004/183379/information-honey-levy.pdf, (accessed 3 June 2014).

88 Mr Stephen Targett, *Submission 19*, p. 4; Mr NJ & KD Fewster, *Submission 46*, p. 8; Australian Food and Grocery Council, *Submission 51*, p. 5; Beechworth Honey Group, *Submission 52*, p. 7; Mr Rod Yates *Submission 12*, p. 7; Mr Kevin J MacGibbon, *Submission 69*, p. 3; AHBIC, *Submission 63*, p. 21; Wheen Bee Foundation Ltd, *Submission 65*, p. 3.

Primary Industries (Excise) Levies Act 1999 and the *Primary Industries Levies and Charges Collection Act 1991*.[89]

2.71 The AHBIC is currently proposing to raise the honey production levy from the current 2.3c/kg to 4.6c/kg on 1 July 2015.[90] One of the purposes of the increase in the levy is to pay for biosecurity officers to operate in each of the states to help inform beekeepers how to manage pests and diseases.[91] However during the committee's hearing in Queensland Dr Whitten of the Wheen Bee Foundation questioned how biosecurity activities had been previously funded.

> Who paid for that before? The states, so the states were paying through their apiary offices for the service which now this small struggling industry is being forced to pay…What we have really got, when you look at the biosecurity situation, is the struggling beekeepers are footing the bill to solve problems not of their making and producing benefits which are captured by others.'[92]

2.72 The committee was informed that current legislation does not permit statutory levies to be charged on services, and as such, the beekeeping industry is prevented from collecting levies (via the bee industry) related to the pollination services it provides to plant industries. According to a number of submitters, this means that one of the largest beneficiaries of the beekeeping industry, the pollination-dependant horticultural and agricultural plant industries, are not contributing to research and development or to biosecurity.[93]

2.73 A number of submitters urged the Commonwealth government to broaden the resource base for these vital activities by amending legislation to allow for the collection of a statutory levy, or some other financial contribution for pollination services.[94]

2.74 The committee notes that recommendation 25 of the More Than Honey report recommended that legislation be amended to allow for a levy on pollination services, and that voluntary contributions made by industry to research be matched by government funding. The committee understands that as pollination services do not fall within the definition of an animal or plant product under Schedule 27 of the *Primary Industries (Excise) Levies Act 1999 (Cth)* and Schedule 14 of the *Primary*

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89 Department of Agriculture, *Honey Levy Information*, http://www.daff.gov.au/__data/assets/pdf_file/0004/183379/information-honey-levy.pdf, (accessed 3 June 2014).

90 AHBIC, *Honey Levy Reform and Increase*, http://honeybee.org.au/programs/honey-levy-reform-and-increase/, (accessed 21 May 2014).

91 Dr Maxwell Whitten, *Committee Hansard*, 20 May 2014, p. 20.

92 Dr Maxwell Whitten, *Committee Hansard*, 20 May 2014, pp 20– 21.

93 Dr Doug Somerville, *Submission 28*, p. 6.

94 Wheen Bee Foundation Ltd, *Submission 65*, p. 6; Beechworth Honey Group, *Submission 52*, p. 25; Dr Doug Somerville, *Submission 28*, p. 6; Mr Moss MacGibbon and Mr Andrew McCallum, *Submission 67*, p. 3.

Industries (Customs) Charges Act 1999 (Cth), an amendment to legislation is required to enable a levy on pollination services.[95]

2.75 In its response to the More Than Honey report, the Commonwealth government suggested that if Pollination Australia wished to establish a levy system, government would consider this proposal.[96] The committee at this point notes considerable criticism of Pollination Australia by several submitters and witnesses during the inquiry.

Committee view

2.76 The committee strongly encourages AHBIC, Pollination Australia and the Commonwealth government to enter into discussions about the best way forward to allow the pollination industry to make a contribution for pollination services to research and development, and to biosecurity.

Recommendation 4

2.77 The committee recommends that AHBIC, Pollination Australia and the Commonwealth government enter into discussions about the best way forward to enable the pollination industry to make a contribution for pollination services to research and development, and to biosecurity.

Marketing the Industry

2.78 The committee considered evidence to suggest that the beekeeping and honey industries could expand the way in which their products and services are marketed. The committee notes that the existing honey production levy lacks a marketing component to address international and domestic opportunities for growth. During its public hearing in Brisbane, the committee heard that marketing was often overtaken by day-to-day issues, and a lack of staffing.[97]

2.79 In comparison to the Australian industry, New Zealand markets its similar high quality honey to great effect, with the industry experiencing continual growth. Since 2009, the New Zealand Ministry for Primary Industries has produced a yearly publication which monitors apiculture trends across the country. It shows that registered beekeepers and hives have increased every year since 2005; the honey crop for 2012/13 was up 72 percent on the 2011-12 crop; and Canada's demand for New Zealand live bees exports also increased despite the country's strong dollar.[98]

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95 Government Response, House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, August 2009, p. 4.

96 Government Response, House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, August 2009, p. 5.

97 Mr Trevor Weatherhead, *Committee Hansard*, 20 May 2014, p. 33.

98 Ministry for Primary Industries, *Apiculture Report for 2013*, December 2013, pp 3–5.

Committee view

2.80 The trends from New Zealand may indicate that the Australian industry has potential for growth and could benefit from a similar marketing strategy. The committee considers that industry's efforts to capitalise on the reputation of Australia's high quality honey internationally and to promote the value of pollination services to farmers domestically should be increased. The committee encourages the beekeeping and pollination service industries to pursue support from relevant states and territories and Commonwealth agencies to expand its marketing expertise.

Chapter 3

Biosecurity issues

3.1 This chapter discusses the adequacy of the current biosecurity arrangements for imported and exported honey, apiary products, package bees and queen bees. It covers issues such as threats to biosecurity that Australia faces in relation to the beekeeping industry and its related products and services, discusses current biosecurity arrangements, and options for advancing the current arrangements that apply to the beekeeping, honey and related industries.

Australian biosecurity arrangements

3.2 Under the Australian Constitution, the Commonwealth does not have exclusive power to make laws in relation to biosecurity and quarantine arrangements. The administration of Australia's biosecurity and quarantine is therefore governed by both Commonwealth and state and territory laws.

3.3 The Commonwealth's quarantine laws are contained in the *Quarantine Act 1908* (Quarantine Act) and associated subordinate legislation, the *Environment Protection and Biodiversity Conservation Amendment (Wildlife Protection) Act 1999*, the *Quarantine Regulations 2000* and the *Quarantine Proclamation 1998*.[1]

3.4 Responsibility for the movement of goods of quarantine concern within Australia's border is assumed by state and territory authorities, which undertake both intra and interstate quarantine operations that reflect regional differences in pest and disease status, as part of their wider plant and animal health obligations.[2]

3.5 The Department of Agriculture manages quarantine controls at Australia's borders to minimise the risk of exotic pests and diseases entering the country and provides import and export inspection and certification services. The Department is also responsible for the development of Commonwealth biosecurity policy, for undertaking risk analyses in relation to the importation of new products to Australia and the establishment of appropriate risk management measures. It also undertakes offshore activities to minimise the risk of unwanted pests and diseases arriving in Australia.[3]

3.6 The Department of Agriculture is responsible for making quarantine decisions under the Quarantine Act and for the development of operational procedures at Australia's borders. Border activities include the interception of biosecurity risks that present at airports, seaports, mail centres and along Australia's coastline. Activities are

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1 Department of Agriculture, *Import risk analysis handbook*, 2011, p. 8.

2 Department of Agriculture, *Import risk analysis handbook*, 2011, p. 6.

3 Department of Agriculture, *About our biosecurity system*, http://www.daff.gov.au/bsg/system, (accessed 3 June 2014).

therefore centred around the screening of mail, vessels (including aircraft), people and goods entering the country.

Pest and disease incursions

3.7 The committee received significant evidence expressing a high degree of concern about the threat to the beekeeping and pollination industries by the presence of the Asian honey bee in Australia and the possibility of varroa mite entering the country.

The Asian honey bee

3.8 Asian honey bees, *Apis cerana* (AHB), are honey bees native to southeast and mainland Asia.[4] The AHB is considered an invasive species in Australia which adversely impacts populations of European honey bees (EHB) by competing for natural resources, robbing managed hives,[5] transmitting disease or parasites and inhabiting nesting spaces which would otherwise be available for native bees, small marsupials and birds.[6] The AHB also presents an environmental threat through the pollination of unwanted weed species and is difficult to eradicate due to its adaptability to varying climates and rapid breeding patterns.[7]

3.9 The National Sentinel Hive Program was initiated in 2000 to enhance surveillance for honeybee parasites and exotic bees in the vicinity of seaports.[8] The program works to detect incursions by conducting surveillance at likely entry points throughout Australia.[9] In May 2007, a nest of Asian honey bees was detected within Australia's quarantine barrier in the mast of a fishing boat in dry dock in Cairns.

3.10 Since that first detection, more than 561 colonies of the bee have been detected and destroyed in the Cairns region.[10] The AHB was initially classed as an emergency pest and an eradication program commenced, however this was not successful and in 2011, activities were moved from an eradication program to a

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4 Plant Health Australia, *Asian Honey Bee Fact Sheet*, p. 1.

5 When there is limited nectar available in the environment, such as during a drought or winter months, bees will rob other beehives of their honey supplies.

6 Senate Rural Affairs and Transport References Committee, *Science underpinning to inability to eradicate the Asian honey bee*, June 2011, p. 85.

7 Senate Rural Affairs and Transport References Committee, *Science underpinning to inability to eradicate the Asian honey bee*, June 2011, pp 85–86.

8 Department of Agriculture, *Review of the National Sentinel Hive Program*, http://www.daff.gov.au/animal-plant-health/pests-diseases-weeds/animal/varroa-mite/sentinel-hive-program-review, (accessed 5 June 2014).

9 Plant Health Australia, *National Bee Pest Surveillance Program*, http://nbpsp.planthealthaustralia.com.au/public.php?page=aboutnbpsp, (accessed 16 January 2014).

10 Queensland Government Department of Employment, Economic Development and Innovation, *Asian Honey Bee Incursion 2007 – 2012*, October 2010, p. 2.

management program.[11] Following the AHB incursion, restrictions were implemented in north Queensland on the movement of managed bees and beekeeping equipment to contain the pest.[12]

3.11 Several submitters were critical of the effort undertaken to eradicate AHB[13] and others questioned the evidence used to determine the decision to discontinue eradication attempts:

> The Asian bee incursion was not taken on seriously and too much time elapsed allowing this difficult pest to escape. The situation should have been handled by entomologists instead of veterinarians. Some of the people consulted on the expert panel were inexperienced with bees. Apiary officers were excluded.[14]

3.12 Other submitters suggested that the eradication program should be reinstated, with adequate staffing and under federal control,[15] and that the Commonwealth, along with the beekeeping industry and pollination dependent industries, support continued research effort to develop effective and specific feeding and bait stations for early detection and eradication of future incursions of Asian honey bees.[16]

3.13 The committee notes that the More Than Honey report made a number of recommendations in relation to strengthening Australia's ability to appropriately manage incursions. Among these was maintaining and strengthening the National Sentinel Hive Program.[17]

3.14 The Department of Agriculture advised the committee that the CSIRO was funded to undertake a risk-based analysis of the costs and benefits of surveillance systems for honey bee pests. The report recommended that the National Sentinel Hive Program be maintained and improved; that targeted studies should be undertaken to

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11 Plant Health Australia, *National Plant Biosecurity Status Report 2012*, p. 148.

12 Queensland Government, Department of Agriculture, Fisheries and Forestry, *Asian honey bee restricted area*, *http://www.daff.qld.gov.au/animal-industries/bees/diseases-and-pests/asian-honey-bees/restricted-area-and-movement-restrictions-for-beekeepers*, May 2013, (accessed 7 April 2014).

13 Mr Moss MacGibbon and Mr Andrew McCallum, *Submission 67*, p. 5; Mr Roland S. Inman, *Submission 20*, p. 1; Mr Chris Berkeley, *Submission 25*, p. 1; Mr Gary Montgomery, *Submission 43*, p. 3.

14 Mr Peter Warhurst, *Submission 18*, pp 1–2; See also Beechworth Honey Group, *Submission 52*, pp 25–26.

15 Mr Kevin MacGibbon, *Submission 69*, p. 3;

16 Wheen Bee Foundation Ltd, *Submission 65*, p. 6; Mr Moss MacGibbon and Mr Andrew McCallum, *Submission 67*, p. 3.

17 House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, May 2008, p. xviii.

obtain data on the efficiency of sentinel hives to detect exotic bee mites; and that operations in port areas should be strengthened to safeguard bee biosecurity.[18]

3.15 In 2012, administration and management of the National Sentinel Hive Program was transferred to Plant Health Australia (PHA) from Animal Health Australia in line with the honey bee industry's move to align with pollination dependent plant industries. At that time, the program was enhanced to make it consistent with recommendations from CSIRO's review. The program has now been renamed to the National Bee Pest Surveillance Program (NBPSP) to reflect its broader scope, and the Commonwealth government, Horticulture Australia Limited and the honey bee industry have committed further funding to the program until 30 June 2015, at which point a review will be undertaken.[19]

3.16 In its submission CSIRO indicated that the NBPSP could be improved, and that it is highly unlikely that all incursions could be detected:

> …methods for detecting swarms of Asian honey bee (*Apis cerana*) remain under development. In particular, Asian honey bee swarms are much less likely to be detected in swarm boxes, and sweep netting appears more promising [the Cairns Asian honey bee incursion was not detected by the log traps in operation at the time]. The NBPSP runs on a very modest budget…It needs to be complemented with activities to mitigate the impacts of any possible incursions to properly manage the risk. Our view is that deepening that defence by undertaking the research now to prevent impact should an incursion occur, will substantially reduce the overall impact on primary producers and the wider community and enable our pollination dependant industries the best chance to adapt effectively to a post-*Varroa* incursion reality.[20]

Varroa mite

3.17 Varroa mites were originally natural external parasites of the Asian honey bee. However in recent decades they have adjusted to living on the European honey bee and established themselves around the world. Varroa mites are pinhead sized mites that feed on both larvae and adult bees, causing the development of infections or deformities, such as stunted wings or missing legs, and continue to diminish the health of the bee colony until all are dead.[21]

3.18 Varroa mites have spread to all inhabited continents except Australia, as depicted in Figure 1 below.[22] In the United States of America and Europe, 95–100 per

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18 Department of Agriculture, *Submission 79*, p. 18.

19 Department of Agriculture, *Submission 79*, p. 18.

20 CSIRO, *Submission 41*, pp 6–7.

21 Department of Agriculture, *Varroa mite*, http://www.daff.gov.au/animal-plant-health/pests-diseases-weeds/animal/varroa-mite/, (accessed 8 January 2014).

22 Department of Agriculture, *Varroa mite*, http://www.daff.gov.au/animal-plant-health/pests-diseases-weeds/animal/varroa-mite/, (accessed 28 January 2014).

cent of unmanaged hives were destroyed by varroa mites within three to four years of infestation.[23] In countries where varroa mite is established, feral honey bees have been largely wiped out. In New Zealand feral bees largely vanished from the North Island within four years of the varroa mite invasion.[24]

3.19 During its public hearing in Murray Bridge, the committee heard evidence to suggest that almost all feral and wild bee populations, including the 1500 species of native bees, would be exterminated if varroa become established in Australia.[25]

Figure 1—Current *varroa* mite distribution (2010)

Red areas indicate establishment of *varroa destructor*[26]

3.20 Researchers warn that Australia is unlikely to remain free of the varroa mite or succeed in eradication as it has not been achieved elsewhere.[27] The Victorian Apiarists' Association submitted that varroa mite would most likely arrive in Australian ports via previously infected EHB from South East Asia or illegal smuggling of EHB.[28] Categorisation of Emergency Plant Pests determines what

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23 Department of Agriculture, *A honey bee industry and pollination continuity strategy should Varroa become established in Australia*, May 2011, p. iii.

24 CSIRO, *Submission 33* to the House of Representatives Standing Committee on Primary Industries and Resources Inquiry into the Future Development of the Australian Honey Bee Industry, p. 9.

25 Dr Doug Somerville, *Committee Hansard*, 15 April 2014, pp 55–56.

26 University of Florida, *Featured Creatures*, http://entnemdept.ufl.edu/creatures/misc/bees/varroa_mite.htm, (accessed 5 June 2014).

27 Department of Agriculture, Fisheries and Forestry, *A honey bee industry and pollination continuity strategy should Varroa become established in Australia*, May 2011, p. iii.

28 Victorian Apiarists' Association, *Submission 71*to the House of Representatives Standing Committee on Primary Industries and Resources Inquiry into the Future Development of the Australian Honey Bee Industry, p. 27.

structure of funding will apply in the event of an incursion.[29] Categorisation of varroa has not yet occurred so it is not known the level of resourcing a possible incursion would attract.[30]

3.21 The committee considers this to be an unacceptable risk.

Recommendation 5

3.22 The committee recommends the categorisation of *varroa destructor* be completed as a matter of urgency to provide industry with funding certainty in case of an incursion.

3.23 RIRDC has stated that if varroa mite does arrive in Australia, it is likely to have a significant impact on apicultural and agricultural industries.[31] In the RIRDC report *Valuing honeybee pollination*, honey bee crop pollination services were valued at $1.7 billion for 1999-2000, based on the direct cost of a loss of pollination services, including directly affecting 9500 jobs. In addition, RIRDC estimated an extra $2 billion loss in industry output and 11 000 jobs following the loss of all pollination services. A decade later, these figures are expected to be far higher.[32]

3.24 Figure 2 below presents the outcome of one approach to modelling the impact of varroa mite on Australia's crop industries completed in 2011. Losses to 25 pollination dependent plant industries over the next 30 years are presented, including potential yield losses and cost increases because of the need to purchase commercial pollination services. These are expected losses in the sense that they reflect that Australia is currently free of varroa mite. On average, annual losses over the 30 year period simulated by the model were around $70 million.[33]

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29 Plant Health Australia, *Pest Categorisation*, http://www.planthealthaustralia.com.au/biosecurity/emergency-plant-pests/pest-categorisation/, (accessed 5 June 2014).

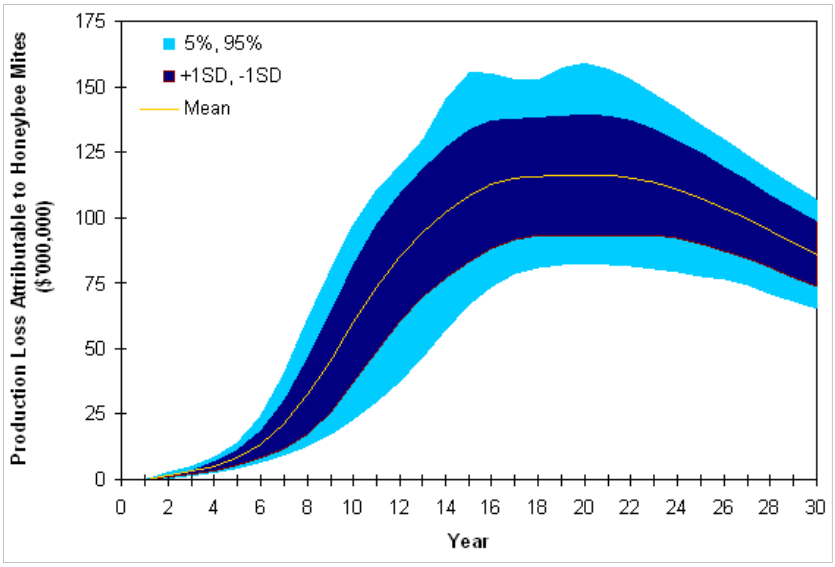
30 Department of Agriculture, *Answers to Question on Notice*, p. 5.

31 RIRDC, *Submission 54* to the House of Representatives Standing Committee on Primary Industries and Resources Inquiry into the Future Development of the Australian Honey Bee Industry, p. 16.

32 RIRDC, *Valuing honey bee pollination*, June 2003, p. iii.

33 Department of Agriculture, *A honey bee industry and pollination continuation strategy should varroa become established in Australia, May 2011, p. 8.*

Figure 2—Estimated loss of plant industry production (decrease yields and higher input costs) over time attributable to honey bee mite incursion, establishment and spread



Department of Agriculture, *A honey bee industry and pollination continuity strategy should varroa become established in Australia*, May 2011, p. 8.

3.25 The committee was presented with a number of suggestions to help to manage a varroa mite incursion should it arrive. These include:

- Importing varroa resistant strains of live bees and commencing breeding programs to create stronger colonies;[34]
- Reviewing procedures for chemical registration to avoid delays during incursion;[35]
- Implementing electronic live maps of registered static and mobile beehives to assist containment during outbreak;[36]
- Increasing numbers of state apiary officers to adequately enforce regulations;[37]
- Finalising the import risk assessment protocol to allow varroa resistant honey bee semen for research and development;[38] and

34 Dr Doug Somerville, *Committee Hansard*, 15 April 2014, p. 61.

35 Plant Health Australia, *Submission 37*, p. 11.

36 Ms Janet Sutherland, *Submission 23*, p. 1.

37 Mr Leo Kuter, *Submission 26*, p. 3.

38 Ms Corinne Jordan, *Submission* 27, p. 2.

- Introducing a funding model to assist industry participants to purchase mite strips to control varroa.[39]

3.26 Dr Doug Somerville and Dr Max Whitten submit that importing varroa tolerant breeding material to conduct research which improves current bee stocks is considered by experts around the world as the best solution to deal with varroa mite, and results in breeding resistant strains of bees.[40] However, Dr Doug Somerville suggested that Australia's bee industry is not big enough to support or sustain its own selective breeding program and that the best alternative is for resistant breeding stock to be imported before there is an incursion.[41]

3.27 Ms Serena Dorf advised the committee that varroa resistant genetic material, in the form of honeybee semen, could be imported as a further measure of prevention. However there is currently no protocol for the importation of honeybee semen despite the beginning of an import risk analysis and the recent resumption of queen bee importation.[42] Honeybee semen can survive at room temperature for 10-14 days, has advantages in ease of transport, long term viability, is low maintenance and offers a low risk as it cannot transfer parasites and mites.[43]

3.28 The committee notes that the More Than Honey report recommended that an import risk analysis be done for drone bee semen by the end of 2008.[44] The government's response to the More Than Honey report indicated that the risk analysis was a comprehensive process and would not be undertaken within the time frame recommended.[45]

3.29 The committee asked the Department of Agriculture to provide information on the status of the import risk assessment for honey bee semen:

> In response to continuing interest from the honey bee industry to import diverse new genetic material into Australia…the department completed a *Review of the importation of queen honey bees* in 2012…The department has again been requested to undertake an analysis of the biosecurity risks associated with importing bee semen. This analysis will be considered for

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39 Mr Ken Gell, *Submission 7*, p. 2.

40 Dr Doug Somerville, *Submission 28*, p. 9 and Dr Maxwell Whitten, *Committee Hansard*, 20 May 2014, p. 25.

41 Dr Doug Somerville, *Committee Hansard*, 15 April 2014, p. 61.

42 Ms Serena Dorf, *Submission 56*, p. 2.

43 Ms Corinne Jordan, *Submission* 27, p. 2.

44 House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, May 2008, p. xix.

45 Government Response, House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, August 2009, p. 8.

> inclusion in the department's future work program, subject to competing priorities and the availability of resources.[46]

3.30 Further biosecurity controls, such as the implementation of electronic 'live' maps, administered by government agencies and updated by individual beekeepers of all static beehive sites, was suggested as a way of providing greater containment in the event of an outbreak of varroa mite. A restriction on mobile beehives when traveling stock routes to maintain a three kilometre distance from registered static hives was suggested as a strategy to reduce the spread of disease or pests.[47] Another suggestion was to monitor ships destined for Australia before they depart overseas ports.[48]

3.31 The South Australian Apiarists' Association made suggestions for improvements to current biosecurity arrangements, recommending that state government inspectors should be in place to maintain control of endemic diseases and neglected material, that a National Incursion Training scheme for beekeepers and state apiary officers be implemented and that government fund research into appropriate chemicals that could be used should an incursion of an exotic pest occur.[49]

3.32 Several submissions supported expansion of the National Bee Pest Surveillance Program. The Department advised that during 2013, 128 sentinel hives for bee parasites were maintained at seaports and airports across Australia.[50] According to Mr Monson, of Monson's Honey and Pollination, sentinel hives should be expanded across the country:

> We have developed, through the cooperation of Horticulture Australia, Plant Health Australia, the beekeeping industry and Rural Development, a surveillance box that uses all of the latest technology. It has a solar panel, cameras, heat sensors and everything. So, if a swarm of bees were to land at a port, it would send a telephone message with a picture to someone who can look at it. We have developed that and it looks like it is going to cost around $250 a unit, but that needs to be rolled out…right around the perimeter of this country, at airports and other places.[51]

Committee view

3.33 The committee agrees with the CSIRO that undertaking research and associated activities through the National Bee Pest Surveillance Program should form part of the risk management strategy to reduce the overall impact of a varroa mite incursion on primary producers, and to enable pollination dependant industries the best chance to adapt effectively.

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46 Department of Agriculture, *Answers to Question on Notice*, p. 21.

47 Ms Janet Sutherland, *Submission 23*, p. 1.

48 Mr Robert Johnstone, *Submission 36*, pp 3-4.

49 South Australian Apiarists' Association, *Submission 4*, pp 1–2.

50 Department of Agriculture, *Answers to Question on Notice*, p. 1.

51 Mr Trevor Monson, *Committee Hansard*, 15 April 2014, p. 50.

3.34 However, the committee also considers that further steps are necessary to better prepare Australia for what appears to be an inevitable incursion of varroa in the near to medium term. Accordingly, the committee recommends that the Commonwealth government give urgent consideration to prioritising the importation of suitable varroa-resistant breeding material into Australia, subject to appropriate safeguards being put in place.

Recommendation 6

3.35 The committee recommends that the Commonwealth government confirm, and consider enlarging, its commitment to the National Bee Pest Surveillance Program.

Recommendation 7

3.36 The committee recommends that the Commonwealth government give urgent consideration to facilitating efforts by the industry to import suitable varroa-resistant breeding material into Australia, subject to stringent biosecurity safeguards being put in place.

Package bees and queen bees

3.37 Australian live honey bees are exported either as individual queen honey bees accompanied by a small number (usually less than 12) of escort worker honey bees or as package honey bees. Package honey bees are generally sold by weight and consist of a mated queen honey bee and between one and two kilograms of worker honey bees. Packages do not contain frames of honey or brood—a supply of sugar syrup or gelled sugar is the package's food source for the duration of travel and establishment. These exports allow fully functioning colonies to be established almost immediately at the destination.[52] During 2000-01 Australian beekeepers sold approximately $3.3 million worth of queen bees. The value of package bee exports has been estimated to be approximately $2 million per year.[53]

3.38 Australia restricts the importation of European queen honey bees to the approved countries of Canada, member states of the European Union, Japan and New Zealand. Each group of queen bees and escorts from a single apiary must be accompanied by a valid import permit, an original health certificate and a declaration from the owner of the exporting apiary. Imported queen and package bees must be packaged in a way that prevents biosecurity hazards as well as meets International Air Transport Association regulations. Before importation, the importer must enter into a

52 Department of Agriculture, *Submission 79*, p. 7.

53 Centre for International Economics, *Future Directions for the Australian Honeybee Industry*, September 2005, p. 3.

written agreement with the Department of Agriculture and reserve space for use of the Bee Post Entry Quarantine Facility.[54]

3.39 Queen bees which are imported into Australia and tested in quarantine for pests and diseases are not released once they are cleared. Unlike other animals, cleared imported queen bees are kept in quarantine and destroyed after an amount of time. This is because queen honey bees from these countries do not achieve Australia's level of protection with respect to a number of hazards, such as certain mites and Africanised honey bees. Queens and escorts are required to undergo post arrival quarantine where a colony is propagated, derived from the imported queen; and then only larvae grafted from this colony are released from quarantine.[55]

3.40 Mr Trevor Monson and Australian Queen Bee Exporters Pty. Ltd suggested that this system should be reviewed to allow for the release of queens as soon as they have been declared free from disease and pests rather than be destroyed.[56]

3.41 The committee asked the department to provide reasons why queens are destroyed instead of being released to the importer. The department advised that the *Review of the importation of queen honey bees (2012)* recommended that progeny of imported queen honey bees be released from quarantine but not the queen honey bee herself, which is consistent with currently available, published scientific information and international standards developed by the World Organisation for Animal Health (OIE Terrestrial Animal Health Code).

3.42 The Department advised the committee that:

- Tracheal mites are minute and reside within the respiratory system of the honey bee. The mites can only be reliably detected using laboratory methods that require maceration of (killing) the queen honey bee.
- Some queen honey bees that are infected with these disease agents may not show clinical signs of infection and/or they may carry undesirable genetics (e.g. Africanisation) that may not be immediately evident. Therefore detection of disease through diagnostic tests, visual observation and examination of the live queen honey bee is unreliable. The larval stages are much more susceptible to disease and clinical signs are more reliably observed, and diagnostic tests are considered to be more sensitive.
- Treatments for some of these diseases are not always effective in preventing or stopping shedding of disease agents. Other options such as heat treatments

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54 Department of Agriculture, *Import case details*, http://apps.daff.gov.au/icon32/asp/ex_casecontent.asp?intNodeId=9036453&intCommodityId=6079&Types=none&WhichQuery=Go+to+full+text&intSearch=1&LogSessionID=0, (accessed 3 April 2014).

55 Department of Agriculture, *Submission 79*, p. 10.

56 Mr Trevor Monson, *Submission 48*, p. 4; Australian Queen Bee Exporters Pty. Ltd, *Submission 49*, p. 2.

> are also fatal to queen honey bees. The review determined that releasing live imported queen honey bees with the limitations described above would not be a reliable means of preventing the introduction of exotic honey bee diseases and pests.[57]

3.43 On this basis, the committee understands that there are no plans to allow for the queen bees to be released from quarantine.

Queen bee levy

3.44 A levy is payable on queen bees produced in Australia and exported by the producer. Export charges are also payable on queen bees produced in and exported from Australia.[58] This levy funds the Rural Industries Research and Development Corporation's queen bee breeding research and development program. The More Than Honey inquiry found that the queen bee and packaged bee export sector is an important part of the Australian honey bee industry and recommended that inspection charges for queen and packaged bees be reduced to make the export of this product more cost effective for producers.[59]

3.45 The government response to this recommendation stated that it agreed to this recommendation subject to the bee industry consulting with states and territories on alternative inspection arrangements to be used to confirm the health status of bee colonies, and consultation by the government with trading partners.[60] However the Victorian Apiarists Association advised the committee that this recommendation had not been implemented.[61]

3.46 During the committee's public hearing in Brisbane, the committee heard that the cost of administering the queen bee levy may be more than it collects:

> We have made representation to the minister to have the queen bee levy set at zero because that one was costing us more than we were actually collecting. I have been informed that that is now to go to the Treasurer and the Prime Minister.[62]

3.47 The committee looks forward to being advised of progress made in relation to the current queen bee levy being made more effective.

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57 Department of Agriculture, *Answers to Questions on Notice*, pp 22–23.

58 Department of Agriculture, Queen Bee Levy Information Sheet, http://www.daff.gov.au/agriculture-food/levies/categories/other_levies/queen_bee/information_sheet, (accessed 23 May 2014).

59 House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, May 2008, p. 161.

60 Government Response, House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, August 2009, pp 12–13.

61 Victorian Apiarists' Association Inc, *Submission 40*, p. 9.

62 Mr Trevor Weatherhead, *Committee Hansard*, 20 May 2014, p. 31.

Quarantine arrangements

3.48 The Department of Agriculture currently leases and operates five post-entry quarantine facilities in four states for imported live animals and plants. Leases for the five facilities are due to expire between 2015 and 2018 and will not be renewed.[63] The Commonwealth government has committed to replace the existing facilities with a new, single consolidated facility on one site at Mickleham, Victoria.[64]

3.49 Several submitters raised concerns that the proposed Victorian site is not appropriate for the bee industry. The committee heard that Victoria's highly variable climate and long winters would reduce optimal breeding conditions and as a majority of queen breeders operate out of NSW and Queensland, the site will add to the costs of importers.[65]

3.50 A number of submitters suggested the Elizabeth Macarthur Agricultural Institute (EMAI), which is the is the NSW Department of Primary Industries' Centre of Excellence for Animal and Plant Health in Camden, would be a better location for a bee quarantine facility as it offers a temperate climate and a more centralised location.[66] During the public hearing in Brisbane, the committee inquired if the Department had considered the possibility of using the EMAI for bee quarantine services:

> The answer is no. We had long discussions with the Wheen Bee Foundation and with the Australian Honey Bee Industry Council some years ago…we had discussions with the industry as to whether the industry was interested in setting up what is called a quarantine-approved premises. The Wheen foundation indicated its interest in possibly undertaking that on its property in Western Sydney. In the end, correspondence from AHBIC and the Wheen foundation to the government said that they were not going to follow through with that interest, and so no further action has been taken.[67]

3.51 The committee notes that recommendation 10 of the More Than Honey report considered the issue of a bee-specific quarantine facility and recommended that consideration be given to establishing it at the EMAI or some other suitable location.[68]

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63 House of Representatives Standing Committee on Public Works, *Construction of a new post-entry quarantine facility at Mickleham, Victoria,* May 2013, p. 11.

64 House of Representatives Standing Committee on Public Works, *Construction of a new post-entry quarantine facility at Mickleham, Victoria,* May 2013, pp 11–12.

65 Ms Corinne Jordan, *Submission 27,* pp 1–2.

66 Ms Serena Dorf, *Submission 56*, p. 2; Beechworth Honey Group, *Submission 52*, p. 13.; Wheen Bee Foundation Ltd, *Submission 65*, p. 5; Dr Doug Somerville, *Submission 28*, p.2; Ms Corinne Jordan, *Submission 27,* p. 1; Dr Doug Somerville, *Submission 28*, p. 9; Ms Serena Dorf, *Submission 56*, p. 2; NSW Apiarists' Association, *Submission 58*, p. 17.

67 Dr Colin Grant, *Committee Hansard*, 20 May 2014, pp 66– 67.

68 House of Representatives Standing Committee on Primary Industries and Resources, *More than Honey: the future of the Australian honey bee and pollination industries*, May 2008, p. xix.

3.52 In addition to the new quarantine facility being located at a site not supported by some industry participants, concerns were also raised at the lack of staff with relevant expertise in existing facilities. The committee heard that managing a colony in an artificial environment requires a high level of expertise to maintain the good health and strength necessary for successful breeding. As Dr Doug Somerville told the committee:

> You can certainly artificially look after a colony in a cage, although it takes very, very high level expertise and AQIS does not have it presently, believe me…The other issue I have right now with that particular facility is that they do not have a protocol or a set of procedures on how to manage those bees.[69]

3.53 During the public hearing in Brisbane, the committee heard that some Australian importers were so doubtful of the quarantine facility's ability to appropriately manage their bees that they had recommended a specialist be present in addition to those staff employed at the quarantine station.[70]

3.54 The Department responded by advising the committee that:

> …there are no specific qualifications that will give an officer all the skills and experience to be able to successfully maintain bee colonies in an artificial environment like a flight room…officers are required to be skilled in basic bee husbandry and colony management and all have a background in beekeeping, including commercial beekeeping businesses and managing/studying bee colonies at university. They have also all received training from the NSW Department of Primary Industries in beekeeping and on-the-job training from the department prior to working with imported bees in quarantine. Additionally, when required, the department calls on the skills of industry specialists and the importer to undertake certain tasks such as grafting.[71]

Committee view

3.55 The committee considers that an effective consultation and communication strategy, to assist the bee industry build readiness for the quarantine station to be relocated, should be developed by the Department of Agriculture in consultation with the AHBIC and other stakeholders.

Recommendation 8

3.56 The committee recommends the Department of Agriculture consult with relevant industry groups to ensure quarantine concerns are addressed, either as part of the proposed facility relocation or through the establishment of a specific bee-centric facility.

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69 Dr Doug Somerville, *Committee Hansard*, 15 April 2014, p. 59.

70 Mr Warren Taylor, *Committee Hansard*, 20 May 2014, p. 50.

71 Department of Agriculture, *Answers to Question on Notice*, p. 20.

Imported and exported honey

3.57 This section discusses the biosecurity arrangements for imported and exported honey.

Biosecurity arrangements for exported honey

3.58 Honey is considered a non-prescribed good; therefore, the Department of Agriculture only becomes involved when export certification by the competent authority of the exporting country is required. In these circumstances, the department ensures compliance with food safety and quarantine requirements of the importing country. There is no legislated biosecurity requirements mandated for export purposes. However to demonstrate compliance with importing country requirements, the industry utilises a range of industry standards including B-QUAL, BSafe and the International Standard for Food Safety Management Systems (ISO22000).[72]

3.59 Under Commonwealth, state and territory regulations, all food businesses have a legal obligation to produce food that is safe for human consumption. The B-QUAL quality assurance program was established for the Australian honey bee industry by the Australian Honey Bee Industry Council.[73] B-QUAL aims to develop accreditation and train industry participants in quality assurance standards, organic standards and biosecurity as well as provide an ongoing third party audit system.[74]

3.60 B-QUAL approved honey suppliers are required to complete biosecurity training and bring operations into line with the program's biosecurity standards. Each enterprise is audited biennially or annually to monitor compliance to their approved Quality Assurance system.[75] In addition to B-QUAL, the honey industry must comply with the Food Standards Australia New Zealand Food Standards Code (FSANZ) which requires businesses to develop a Hazard Analysis and Critical Control Point (HACCP) food safety program. The HACCP program identifies and controls food safety hazards of microbiological, chemical and physical properties.[76] Further to meeting domestic compliance requirements, various international conditions are imposed on Australian honey exporters.

Biosecurity arrangements for imported honey bee products

3.61 Chapter 4 of this report discusses issues raised in relation to the honey food standard and concerns that Australian honey producers are disadvantaged as imported

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72 Department of Agriculture, *Submission* 79, p. 7.

73 AUS-QUAL Pty Ltd, *B-Qual*, http://www.ausqual.com.au/certification-services/b-qual.aspx, (accessed 31March 2014).

74 Australian Honey Bee Industry Council, *B-Qual*, http://honeybee.org.au/programs/b-qual/, (accessed 31 March 2014).

75 B-QUAL, *Getting Started*, http://www.bqual.com.au/how.aspx, (accessed 31 March 2014).

76 AUS-QUAL Pty Ltd, *HACCP Certification*, http://www.ausqual.com.au/certification-services/haccp.aspx, (accessed 31 March 2014).

honey products are not subject to the same quality and biosecurity standards as domestic producers.[77]

3.62 The Department of Agriculture manages an import risk analysis (IRA) process to identify and appropriately manage the risks posed by the importation of honey bee commodities. The intention is to minimise the likelihood of disease incursions and their consequences, whilst continuing to fulfil obligations under international trade agreements.[78]

3.63 Usually, the exporter provides a written import proposal to the department requesting market access and may include information on incidence of diseases or treatments used on the goods.[79] An 'import proposal' is a generic term used to describe a proposal to bring into Australia plants, animals or other goods not imported previously, or not imported previously from the country or region concerned. After receiving the proposal, the department considers whether a risk analysis is required, and if there is sufficient information to proceed. A risk analysis may also be undertaken if the risk profile of an existing trade in a good, or pests or diseases have changed.[80]

3.64 Currently, the department imposes conditions on commodities intended for Australia to determine if products require quarantine permits or treatments, or are subject to other quarantine conditions.[81] For a commercial quantity of honey product the following conditions apply:

(a) a quarantine entry must be lodged for each consignment;

(b) the product must be commercially processed and packaged;

(c) contaminants must have been removed from containers; and

(d) an accompanying declaration states the honey has been processed to remove contaminants, or the honey is a sample.[82]

3.65 In the event a product does not meet these conditions, an import permit is required.[83]

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77 Mr Rod Yates, *Submission 12*, pp 10–11; Mr Dave Elson, *Submission 76*, p. 5.

78 Department of Agriculture, *Import Risk Analysis*, 2011, p. 9.

79 Department of Agriculture, *Import Risk Analysis*, 2011, p. 10.

80 Department of Agriculture, *Import Risk Analysis*, 2011, pp 10–11.

81 Department of Agriculture, *Information for Food Importers*, http://www.daff.gov.au/biosecurity/import/food/info-for-food-importers, (accessed 5 April 2014).

82 Department of Agriculture, *Import case details*, http://apps.daff.gov.au/icon32/asp/ex_casecontent.asp?intNodeId=9051649&intCommodityId=934&Types=none&WhichQuery=Go+to+full+text&intSearch=1&LogSessionID=0, (accessed 5 April 2014).

3.66 Samples of imported food consignments are inspected by the department to ensure contents meet the Australian requirements for public health and safety and comply with Australian food standards as detailed in the Australia New Zealand Food Standards Code (the Code).[84] Food safety inspection of imported food is managed under the *Imported Food Control Act 1992*.

3.67 Under the scheme, foods are referred for inspection by the Australian Customs and Border Protection Service (Customs). Each consignment has a five per cent chance of being referred for inspection but this may vary according to its risk level. The selection of food consignments for inspection is random and samples may be analysed for pesticides and antibiotics above accepted levels, microbiological contaminants, natural toxicants, metal contaminants and food additives.[85] The Imported Food Program (IFP) Testing Guidelines provide information for appointed analyst laboratories on requirements for analysis of food sampled under the Imported Food Inspection Scheme.[86]

3.68 According to some submitters, there should be a more rigorous inspection of honey that is imported to Australia, so it can be subject to the same quality assurance prescriptions as Australian honey is subjected to when it is exported to other countries.[87] WA Farmers submitted that imported honey should have the same or higher quality assurance standards applied to it.[88]

3.69 During the public hearing in Murray Bridge, the committee heard that there may also be cause to increase the percentage of sample testing:

> It should be increased to 100 per cent…the problem is that a lot of the honey that is floating around the world is potentially coming out of countries with suspect bee practices. Chinese honey has actually been banned in some of the European countries, and it is tested beyond belief in the US, but it comes in here easily.[89]

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83 Department of Agriculture, *Import case details*, http://apps.daff.gov.au/icon32/asp/ex_casecontent.asp?intNodeId=9051649&intCommodityId=934&Types=none&WhichQuery=Go+to+full+text&intSearch=1&LogSessionID=0, (accessed 5 April 2014).

84 Department of Agriculture, Fisheries and Forestry, *Imported Food Inspection Scheme* http://www.daff.gov.au/biosecurity/import/food/inspection-scheme, (accessed 31 March 2014).

85 Department of Agriculture, Fisheries and Forestry, *Imported Food Inspection Scheme* http://www.daff.gov.au/biosecurity/import/food/inspection-scheme, (accessed 31 March 2014).

86 Department of Agriculture, Fisheries and Forestry, *Importing Food Program: Testing Guidelines*, http://www.daff.gov.au/biosecurity/import/food/testing-labs/ifp-testing-guidelines, (accessed 31 March 2014).

87 Wheen Bee Foundation Ltd, *Submission* 65, p. 4.

88 WA Farmers, *Submission* 72, p. 3.

89 Dr Doug Somerville, *Committee Hansard*, 15 April 2014, p. 60.

3.70 The department advised that testing under the current inspection scheme is offered to importers by six appointed laboratories. Three of these laboratories conduct the testing at their facility with the remainder sub-contracting the work to those three laboratories.[90]

Recommendation 9

3.71 The committee recommends the Department of Agriculture, in consultation with industry groups, review the Import Risk Analysis for honey bee commodities, with a view to protecting the Australian industry and its 'clean, green' reputation.

Domestic biosecurity improvement

3.72 During the inquiry the committee also heard a range of suggestions for improving existing biosecurity measures to help protect the Australian honey bee industry. These include:

- Mandatory national registration of all beehives;[91]
- An annual 'State of the Industry' report to be conducted on the Australian beekeeping industry to provide ready access to key industry data such as the number of hives, location of hives and beekeepers, quantity and value of hive products being produced, value of paid pollination services undertaken, value of capital investment and return on investment and level of beekeeper training.[92]
- Introduce the mandatory labelling of hives to include brand registration and mobile phone numbers to ensure that beekeepers receive urgent notifications via SMS.[93]
- Local councils to advertise the necessity of beekeeper and hive registration in similar way that is done for registration requirements related to domestic pets.[94]
- Implement a National Standard or Code of Practice for beekeeping, as proposed by AHBIC, promoting beekeeping best management practices that include commercial and hobby beekeepers to promote optimal biosecurity.[95]

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90 Department of Agriculture, *Answers to Question on Notice*, p. 17.

91 Capilano Honey Ltd, *Submission 39*, p. 6; Ipswich and West Moreton Beekeepers Association, *Submission 60*, p. 2.

92 Beechworth Honey Group, *Submission 52*, p. 8.

93 Ms Serena Dorf, *Submission 56*, p. 3.

94 Victorian Apiarists' Association Inc Melbourne Section, *Submission 61*, p. 7.

95 VFF State Beekeeping Branch, *Submission 75*, p. 3.

Committee view

3.73 The committee supports the concept of producing a publication which monitors beekeeping trends across the country. An annual industry report could be used to provide a financial and physical forecast reflecting industry trends and issues, and production levels. It could also be used to identify options to market honey and hive products and pollination services. In chapter 2 the committee discussed the possibility of establishing a national honey bee colony survey scheme with a view to collecting reliable data that monitors the long term health of the industry, and considers that information collected as part of such a scheme could feed into an annual industry publication.

Recommendation 10

3.74 The committee recommends that the Commonwealth government, in consultation with the AHBIC and other relevant stakeholders, investigate the viability and benefits of producing an annual industry report in the terms outlined in paragraph 3.73.

Bumblebees in Tasmania

3.75 European bumblebees were accidently introduced into Tasmania in 1992, most likely from New Zealand. Since this time feral populations have been distributed across the state. Bumblebees cannot be imported to Australia and are prohibited by state legislation from being moved from Tasmania to other states or territories as they can spread weeds.[96]

3.76 According to the Costa horticultural company, the effective pollination of glasshouse tomato plants is accomplished by a few species of bees, and while the use of native bees has been researched, the bumblebee remains the most efficient.[97] Costa claims that the use of bumblebees is prohibited in Australia because of a bureaucratic misunderstanding of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and consequently, tomato glasshouse producers substitute pollination by tapping each plant with a vibrating wand which adds considerably to production costs.[98]

3.77 As bumblebees are used in commercial glasshouses in New Zealand, South Korea, Japan, Chile and Peru, Costa argues that Australia is placed at a competitive disadvantage domestically and internationally.[99] The Tasmanian Farmers and Graziers

96 Aussie Bee, *What Harm Could Exotic Bumblebees Do in Australia?,* http://www.aussiebee.com.au/bumblebeeharm.html, (accessed 26 May 2014).

97 Costa, *Submission 22*, p. 3.

98 Costa, *Submission 22*, p. 4.

99 Costa, *Submission 22*, p. 7.

Association and Costa suggest that bumblebees should be permitted for use in glasshouse pollination in Tasmania[100].

3.78 In 2008, the Minister for Environment rejected an application by the Australian Hydroponic and Greenhouse Association requesting approval for the importation and use of bumblebees for pollination in glasshouses.[101]

3.79 The More Than Honey inquiry recommended that research into alternative pollinators such as bumbles should be undertaken, and submitters and witnesses to this inquiry agreed that more research into the matter would need to be completed before changes in legislation were made to allow the use of bumblebees for intensive pollination in glasshouses.[102] Beechworth Honey Group cautioned against the use of bumblebees and said their use was 'not supported widely by the industry.'[103]

Committee view

3.80 Although the committee notes that bumblebees already exist in Tasmania, governments would need to be assured that there was sufficient evidence to warrant a trial of bumblebees for use in commercial pollination, and that very strict biosecurity controls were in place. The committee was not in a position to further investigate their potential use in Australia.

100 Tasmanian Farmers & Graziers Association, *Submission 7*0, pp 6–8; Costa, *Submission 22*, p. 8.

101 Costa, *Submission 22*, pp 4–5.

102 Tasmanian Beekeepers' Association lnc, *Submission 47*, p. 1; Mr Trevor Monson, *Committee Hansard*, 15 April 2014, pp 49–50.

103 Beechworth Honey Group, *Submission 52*, pp 15–16.

Chapter 4

Food labelling

Introduction

4.1 This chapter covers food labelling issues raised in relation to honey, including the level of detail in the honey standard, country-of-origin labelling (CoOL), enforcement of standards and labelling, and potential changes to the content of labels with regard to health information.

Food labelling standards

4.2 Food Standards Australia New Zealand (FZANZ) is responsible for the development and administration of the Australian New Zealand Food Standards Code (the Food Standards Code). The Food Standards Code includes general food safety requirements and commodity specific requirements. The code also includes maximum levels for contaminants, and Maximum Residue Limits (MRLs), which are the maximum amounts of agricultural and veterinary chemicals permitted in specific commodities including honey to ensure that the chemicals do not pose an undue hazard to human health.[1]

4.3 The Food Standards Code has a number of standards relevant to bee products, including Standard 1.2.2 Food Identification Requirements; Standard 1.2.3 – Mandatory Warning and Advisory Statements and Declarations and Standard 2.8.2 – Honey. The Food Standards Code is enforced by state and territory agencies for food within Australia and the Department of Agriculture for food that is imported.[2] Additional food labelling requirements are also set out in the *Competition and Consumer Act 2010* (CC Act). The CC Act requires that labels are used to provide information that is not false or misleading.[3]

4.4 In 2011, the independent Panel for the Review of Food Labelling Law and Policy, commissioned by the Australia and New Zealand Food Regulation Ministerial Council, presented its final report *Labelling Logic*, which noted that the approach to food labelling was 'adhoc' and had evolved in a sporadic fashion to address issues raised by the competing interests of consumers, industry and government.[4]

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1 Department of Agriculture, *Submission 79*, pp 11–12; Australian Pesticides and Veterinary Medicines Authority, *Maximum Residue Limits (MRL) in Food and Animal feedstuff*, http://www.apvma.gov.au/residues/standard.php, (accessed 4 June 2014).

2 Department of Agriculture, *Submission 79*, pp 11–12.

3 Business.Gov.Au, *Labelling Fair Trading*, http://www.business.gov.au/BusinessTopics/Fairtrading/Pages/Labelling.aspx, (accessed 26 March 2014).

4 Review of Food Labelling Law and Policy, *Labelling Logic: Review of Food Labelling Law and Policy (2011)*, January 2011, p. 1.

4.5 The Council of Australian Governments, Legislative and Governance Forum on Food Regulation, responded to the Labelling Logic report and proposed actions to balance the need to improve the information for consumers against the need for marketing flexibility, minimising the regulatory burden on industry and barriers to trade. There was support, or in principle support, for many of the 61 recommendations in the response.[5] However, during this inquiry the committee has received evidence identifying continuing concerns about food labelling, which are discussed below.

The honey food standard

4.6 This section covers the honey food standard and issues raised during the inquiry including the level of detail in the standard, chemical contamination and the presence of non-honey products.[6] Food standard 2.8.2 on honey requires that honey must contain no less that 60 per cent reducing sugars, no more than 21 per cent moisture, and provides that:

> **honey** means the natural sweet substance produced by honey bees from the nectar of blossoms or from secretions of living parts of plants or excretions of plant sucking insects on the living parts of plants, which honey bees collect, transform and combine with specific substances of their own, store and leave in the honey comb to ripen and mature.[7]

4.7 The More Than Honey inquiry also identified issues with honey imports and standards, including price competition, level playing fields and labelling of blended products. The More Than Honey inquiry recommended that the Commonwealth government pursue the development product standard for honey and other bee products with regard to food standard and chemical contamination in line with those in force in the European Union.[8] Capilano Honey submitted that the honey standard lacks detail, and is not representative of international standards of substance for honey, such as those of the European Union, Canada and China.[9]

4.8 The Australian Food and Grocery Council urged caution about changing the honey food standard, particularly in relation to potential trade barriers, but was somewhat supportive of alignment with international standards.[10]

4.9 FSANZ informed the committee that the European standard for honey contains a number of compositional and quality parameters that are not appropriate for

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5 Legislative and Governance Forum on Food Regulation (FoFR), *Response to the Recommendations of Labelling Logic: Review of Food labelling Law and Policy (2011)*, December 2011.

6 See, for example, Capilano Honey Ltd., *Submission 39*, p. 6; Australian Honey Bee Industry Council, *Submission 63*, p. 10; Mr Benjamin Hooper, South Australian Apiarists Association Incorporated, *Committee Hansard*, 15 April 2014, pp 4, 8.

7 Food Standard 2.8.2, *Honey*, p. 1.

8 Standing Committee on Primary Industries and Resources, *More Than Honey: the future of the Australian honey bee and pollination industries*, May 2008, p. xxi.

9 Capilano Honey Ltd., *Submission 39*, p. 6.

10 Australian Food and Grocery Council, *Submission 51*, p. 9.

Australia as they do not relate to public health and safety or to misleading or deceptive conduct. FSANZ also noted that the Food Standards Code was created on the basis of 'minimum effective regulation' to remove unnecessary prescription that could stifle innovation.[11]

4.10 Several witnesses also raised concerns about chemicals in imported honey, including suggestions that there may be some chemicals which are not permitted for agricultural use in Australia that may be present in imported honey as a result of their use in agriculture overseas.[12] FSANZ informed the committee that: 'There are no agricultural and veterinary chemicals that are permitted in honey for sale that are not also permitted to be used in Australian agriculture.'[13] Concerns raised by submitters about testing for chemicals and residues in imported honey[14] are also discussed in Chapter 2.

Non-honey products

4.11 This section discusses concerns raised about whether the honey standard adequately deals with non-honey products such as corn syrup.[15] FSANZ informed the committee that, regardless of whether the honey was domestic or imported, the presence of corn syrup in a product labelled as honey would breach the honey standard:

> The honey standard has been designed and has a definition which specifically requires honey to be the product that is produced by bees interacting with plants, and not bees fed on sucrose or dextrose or whatever sugar they might be fed on or any other sugar product. … Honey is a prescribed name—it is one of the few prescribed names in the food code—and so a product that is on the shelf as honey must be that particular product and cannot be corn syrup.[16]

4.12 FSANZ clarified that a product containing a combination of honey and added sugars may be sold under another name, for example, sweetened honey.[17]

4.13 In January 2011, the Labelling Logic report recommended that:

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11 Food Standards Australia New Zealand, *answer to written question on notice*, 20 May 2014, (received 27 May 2014).

12 Mr Colin Cooper, New South Wales Apiarists Association, *Committee Hansard,* 20 May 2014, pp 6–7; Mr Trevor Weatherhead, Australian Honey Bee Industry Council, *Committee Hansard*, 20 May 2014, p. 34.

13 Food Standards Australia New Zealand, *answer to question on notice*, 20 May 2014, (received 27 May 2014).

14 Dr Doug Somerville, *Submission 28*, p. 8; NSW Apiarists Association, *Submission 58*, pp 19–20. Australian Honey Bee Industry Council, *Submission 63*, p. 10.

15 Mr Leigh Duffield, *Submission 31*, p. 3.

16 Mr Peter May, Department of Agriculture, *Committee Hansard,* 20 May 2014, p. 59.

17 Food Standards Australia New Zealand, *answer to question on notice*, 20 May 2014, (received 27 May 2014).

> …where sugars, fats or vegetable oils are added as separate ingredients in a food, the terms 'added sugars' and 'added fats' and/or 'added vegetable oils' be used in the ingredient list as the generic term, followed by a bracketed list (e.g., added sugars (fructose, glucose syrup, honey), added fats (palm oil, milk fat) or added vegetable oils (sunflower oil, palm oil)).[18]

4.14 The government response to the Labelling Logic report indicated that, in respect of this recommendation, it proposed to request FSANZ to undertake a technical evaluation and provide advice on the proposed changes to the ingredient listing and Nutrition Information Panel prior to considering any amendments to the Food Standards Code.[19] The committee asked FSANZ whether an approach similar to Labelling Logic recommendation could be applied to the ingredients in honey products such as corn syrup and additives. FSANZ responded to the committee stating that:

> The *Australia New Zealand Food Standards Code* currently requires honey products containing ingredients, such as corn syrup and additives, to include a statement of ingredients which lists the ingredients in the product. Ingredients must be declared in descending order of ingoing weight using a common name or a name that describes the true nature of the ingredient.
>
> FSANZ's work on [the relevant] Recommendation…is considering the technical aspects of applying the proposed approach to ingredients lists to all foods including honey products. FSANZ expects to provide its technical evaluation and advice to the COAG Legislative and Governance Forum on food Regulation in mid-2015.[20]

Committee view

4.15 The committee notes that food labelling as a whole is a vexed issue. Despite multiple reviews and inquiries, there has been little action to improve labelling standards. The current system is bad for both consumers and producers, but there has been a lack of action on the part of successive governments.

4.16 The committee notes the honey industry's proposal for a revised honey standard[21] and that the industry is discussing the proposal with FSANZ. From the evidence put before it, the committee considers that addressing the concerns discussed below about country-of-origin labelling and enforcement of standards and labelling may be more likely to assist the honey industry than changes to the honey standard.

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18 Review of Food Labelling Law and Policy, *Labelling Logic: Review of Food Labelling Law and Policy (2011),* January 2011, p. 9.

19 Legislative and Governance Forum on Food Regulation (FoFR), *Response to the Recommendations of Labelling Logic: Review of Food labelling Law and Policy (2011).,* December 2011, p. 21.

20 Food Standards Australia New Zealand, *answer to written question on notice*, 20 May 2014, (received 27 May 2014).

21 Australian Honey Bee Industry Council, *Submission 63,* p. 10; Mr Trevor Weatherhead, Australian Honey Bee Industry Council, *Committee Hansard,* 20 May 2014, p. 34.

Country-of-origin labelling

4.17 A number of submitters raised concerns about country-of-origin labelling (CoOL) for honey products.[22] Some submitters suggested that imported honey is often blended with local honey or substituted for local honey to keep prices down.[23] It was also suggested that honey may be shipped through intermediate countries to disguise the true origin.[24] However this view was not universal; Dr McKee from Capilano Honey informed the committee that in his view the honey sold in supermarkets was generally Australian.[25]

4.18 Other submitters noted confusion for consumers about the meanings of the terms 'made from imported and Australian product', 'made from imported and local ingredients', 'Packed in Australia', 'Australian Honey', and 'Made in Australia'.[26] The Wheen Bee Foundation submitted that:

> Consumers are often willing to pay a premium if they believe they are supporting Australian producers. As it stands there is confusion surrounding the "Made in Australia" claim on many products that are actually a blend of imported and Australian honey. This confusion is likely to result in customers genuinely wishing to support Australian beekeepers but inadvertently diverting their investment to imported products.[27]

4.19 Another submitter queried the terminology 'Made in', suggesting that the use of the words 'Made in' should result in a product that was actually produced (not just packed) in the country claimed however this is not currently the case.[28] The Australian Food and Grocery Council submitted its view on country-of-origin Labelling:

> Current CoOL requirements as set out in the Australian Consumer Law allow the "*Made in Australia*" claim only when a substantial transformation of the ingredients has occurred during manufacture. Importing honey and blending it with Australian honey would not be considered a substantial transformation according to current court decisions. The use of a "*Made in Australia*" claim under these conditions would appear to be potentially

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22 Mr Ian Zadow, Australian Honey Bee Industry Council, *Committee Hansard*, 15 April 2014, p. 25; Beechworth Honey Group, *Submission 52*, pp 13–14; Australian Honey bee Industry Council Inc., *Submission 63*, p. 14; Crop Pollination Association Inc. (Vic), *Submission 14*, pp 7–8; Mr Gary Montgomery, *Submission 43*, p. 1; Mr John Edmonds, *Submission 44*, pp 1–2; Mr David and Wendy Mumford, *Submission 30*, pp 4–6.

23 Mr Peter Warhurst, *Submission 18*, p. 2; Mr Gary Montgomery, *Submission 43*, p. 2; The Western Australian Farmers Federation Inc., *Submission 72*, p. 5.

24 Mr Gary Montgomery, *Submission 43*, p. 2;

25 Dr Benjamin McKee, Capilano Honey Ltd, *Committee Hansard*, 20 May 2014, p. 43.

26 Apple and Pear Australia Ltd., *Submission 24*, p. 7; Mr Gary Montgomery, *Submission 43*, p. 1; Beechworth Honey Group, *Submission 52*, p. 13; Australian Honey bee Industry Council Inc., *Submission 63*, p. 14.

27 Wheen Bee Foundation, *Submission 65*, p. 21.

28 Mr Moss MacGibbon and Mr Andrew McCallum, *Submission 69*, p. 4.

> misleading to consumers and in likely contravention of the Australian Consumer Law.[29]

4.20 FSANZ clarified that the Food Standards Code currently requires that most packaged foods, including packaged honey products, are labelled with a statement on the package indicating the country where the food was made, produced, grown, manufactured or packaged and whether the food is constituted from ingredients imported into that country or from local and imported ingredients.[30]

4.21 Some submitters and witnesses suggested that the percentage of each ingredient and its country of origin should be on the product label.[31] Others were comfortable with just the imported percentage of the consumable contents appearing on the label.[32] FSANZ informed the committee that:

> In December 2003, the then Australia and New Zealand Food Regulation Ministerial Council approved a policy guideline for country of origin labelling of food which states that country of origin labelling should apply to whole foods, not to individual ingredients…Food producers or suppliers can however voluntarily label food to indicate what percentage of the product is from Australia and whether it is the main product or an additive, as long as such labelling is not misleading or deceptive, in accordance with Australia Consumer Law.[33]

Committee view

4.22 From the evidence that it has received, the committee considers that country-of-origin labelling requirements are not effective and may require reform. The committee notes suggestions by some submitters that country-of-origin labelling be dealt with as part of a broader country-of-origin labelling reform, rather than developing specific provisions for honey products.[34] The committee generally supports that approach and notes the opportunity provided by the current inquiry into the country-of-origin labelling by the House of Representatives Standing Committee on Agriculture.[35]

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29 Australian Food and Grocery Council, *Submission 51*, p. 6.

30 FSANZ, *answer to written question on notice*, 20 May 2014, received 27 May 2014.

31 Mr Peter Warhurst, *Submission 18*, p. 2; John Edmonds, *Submission 44*, p. 1; Ms Serena Dorf, *Submission 56*, pp 3–4; VFF State Beekeeping Branch, *Submission 75*, p. 8; Mr David and Wendy Mumford, *Submission 30*, pp 4–5; Mr Daniel Jones, Queensland Beekeepers Association, *Committee Hansard*, 20 May 2014, p. 16.

32 Mr Moss MacGibbon and Mr Andrew McCallum, *Submission 69*, pp 4–5.

33 FSANZ, *answer to written question on notice*, 20 May 2014, received 27 May 2014.

34 Australian Food and Grocery Council, *Submission 51*, p. 3; Capilano Honey, *Submission 39*, p. 6; Beechworth Honey Group, *Submission 52*, p. 13.

35 House of Representatives Standing Committee on Agriculture and Industry, http://www.aph.gov.au/Parliamentary_Business/Committees/House/Agriculture_and_Industry/Food_Labelling/Terms_of_Reference, (accessed 4 April 2014).

4.23 Subject to the recommendations of the current country-of-origin labelling inquiry, the committee encourages the Commonwealth government to consider developing a country-of-origin labelling system that presents consumers with an accurate picture of a product's contents.

Enforcement of standards and labelling requirements

4.24 Putting to one side the question of the appropriateness of standards and labelling requirements, some submitters raised serious concerns about the enforcement of the honey food standard for imported products and blended honey which may contain corn syrup or other additives.[36] Several submitters identified examples of products being sold as Australian honey that, in their view, were not honey and had misleading information about the origin of the product. In particular, some submitters expressed frustration at the seeming lack of action taken by the ACCC, and the timeliness of any action that was taken.[37]

4.25 The AHBIC raised concerns with the ACCC in September 2012, regarding misleading advertising for a honey product imported from Turkey called Victoria Honey. The ACCC replied in October, 2012 to say that the product may breach the Australian consumer laws and that details had been lodged in the ACCC database.[38]

4.26 Subsequent testing of the product by the AHBIC and Victoria Health in October 2013 showed that the product was probably maize sugar syrup.[39] Hence, there were concerns about misleading advertising for both the origin of the product and its compliance with the honey standard. The ACCC began reconsideration of the complaint in November 2013.

4.27 Two other potential cases of imported non-honey products being sold as honey were identified by the industry and referred to the ACCC and the Victorian government.[40] A fourth product was reported to the committee during this inquiry.[41]

4.28 The ACCC informed the committee that following its investigation the supplier of Victoria Honey had removed all the product from its retail stores and its wholesale customers had also agreed to remove stock from shelves. The supplier claimed that they had been misled about the composition of the product. The ACCC informed the supplier of its intended enforcement action in March 2014 and the

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36 South Australian Apiarists' Association Inc. *Submission 4,* p. 2; Australian Honey Bee Industry Council Inc., *Submission 63,* pp 10–13; NSW Apiarists Association, *Submission 58,* pp 19–20; Capilano Honey Ltd., *Submission 39,* p. 6; Victorian Apiarists' Association, *Submission 40,* pp 7–8.

37 Mr John Edmonds, *Submission 44,* p. 1. Australian Honey Bee Industry Council, *Submission 63,* pp 11–14; Leigh Duffield, *Submission 31,* p. 4; Victorian Apiarists' Association, *Submission 40,* pp 7–8.

38 Australian Honey Bee Industry Council, *Submission 63,* p. 11.

39 Australian Honey Bee Industry Council, *Submission 63,* pp 11–12.

40 Australian Honey Bee Industry Council, *Submission 63,* pp 11–14.

41 Mr Trevor Weatherhead, *Committee Hansard,* 20 May 2014, p. 30.

supplier sought more time to respond. The ACCC also indicated that it intends to communicate the enforcement outcome expected as a result of its initial investigation to industry and publicly, in order to help bring about change in the broader honey industry.[42] In correspondence to the committee, the ACC indicated that:

- Even once lodgement of the initial complaint in the ACCC database had taken place, a decision not to pursue follow-up action was consistent with the ACCC's *Compliance and Enforcement Policy* which states that the ACCC will focus on matters involving widespread conduct and/or significant consumer detriment.
- In the absence of health or safety risks to consumers, the ACCC does not generally request a recall of a product without first giving the supplier the opportunity to respond to the allegations being made.[43]

4.29 The AHBIC advised the committee that it had raised the issues discussed above with the Minister and the Department of Agriculture. The department informed the committee that it:

> …assessed the concerns and nature of the complaint being raised. There were no food safety concerns raised and as the matters related to misrepresentation through use of brand names and mislabelling to deceive the consumer (labelled as honey when the product was not honey), the issue was considered primarily a consumer law matter, which the industry association had already referred to the appropriate consumer law agencies...[44]

4.30 However, following questioning by the committee, the department acknowledged that food labelling offences may apply under Section 3 of the *Imported Food Control Act 1992*, which is administered by the Department of Agriculture.[45] Where the goods description is false, such as labelling synthetic honey as natural honey, this would contravene the applicable standards and where proven, the goods would be considered a 'failing food'.[46] Failing food may be treated to be brought into compliance (re-label with appropriate goods description), exported or destroyed[47] and a holding order issued to increase border inspection of subsequent imports.[48] The department informed the committee that:

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42 ACCC, *Additional information,* received 13 May 2014, p. 4.

43 ACCC, *Additional information,* received 13 May 2014, p. 3.

44 Department of Agriculture, *answer to written question on notice 12,* 26 May 2014, (received 3 June 2014).

45 Department of Agriculture, *answer to written question on notice 12,* 26 May 2014, (received 3 June 2014); Department of Agriculture, *Submission 79,* p. 11.

46 *Imported Food Control Act 1992,* ss 3, 14, and 16.

47 *Imported Food Control Act 1992*, s. 14.

48 *Imported Food Control Act 1992*, s. 15.

> The issues detailed in the Hansard are about product in the market place and the department understands these concerns have been raised with the relevant state or territory authorities and the Australian Competition and Consumer Commission.
>
> If these agencies were to take action and prove that the importer was deceiving the consumer through misrepresenting synthetic honey, the department could consider additional action under the Imported Food Control Act on provision of this evidence, such as where the importer knowingly imported synthetic honey but labelled it as natural honey (Section 8A labelling offence and/or Section 15).[49]

Committee view

4.31 The committee is concerned about the time taken by the ACCC to resolve issues concerning Victoria Honey, and notes that other instances remain unresolved. Given that timeliness is one of the principles underlying the ACCC's *Compliance and Enforcement policy*,[50] the committee encourages the ACCC to resolve complaints over labelling in a more timely fashion than has been evident in the instances outlined above.

Health labelling

4.32 This section covers concerns raised by some submitters about potential changes to front-of-pack health labelling systems for food products.[51]

4.33 In December 2013 the Legislative and Governance Forum on Food Regulation (the Forum) endorsed a Health Star Rating Calculator. The voluntary Health Star Rating System is intended to give consumers at-a-glance information about the food they are buying through a star rating scale of half to five stars for packaged food products in Australia. The Forum also agreed to the development of a process for addressing anomalies in the Health Star Rating System.[52] The Health Star Rating Advisory Committee is considering the process for addressing anomalies in the Health Star Rating Calculator.[53]

4.34 Beechworth Honey Group submitted that a 'traffic light' system, or something similar would be problematic for the Australian honey industry because honey, while it is a natural sweetener, is predominantly composed of sugars, and would

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49 Department of Agriculture, *answer to written question on notice 12*, 26 May 2014, (received 3 June 2014).

50 *ACCC Compliance and Enforcement Policy*, February 2014, p. 3.

51 Beechworth Honey Group, *Submission 52*, pp 13–14; NSW Apiarists Association, *Submission 58*, p. 20; Wheen Bee Foundation, *Submission 65*, pp 21–22.

52 Legislative Governance Forum on Food Regulation, *Final Comunique*, 13 December 2013, p. 1.

53 Department of Health, Front-of-pack labelling updates, *Health Star Rating Advisory Committee Meeting – outcomes of meeting held on 3 March 2014*, http://www.health.gov.au/internet/main/publishing.nsf/Content/foodsecretariat-front-of-pack-labelling-1, (accessed 28 May 2014).

automatically be labelled as 'bad' or 'red'.[54] The NSW Apiarists Association also submitted that:

> The proposed traffic light nutrition labelling system could unfairly label honey as 'bad', despite scientific evidence of its potential as a prebiotic, and the fact that at the standard consumption of one to two tablespoons a day the sugars in honey are not detrimental as part of a balanced diet.[55]

Committee view

4.35 The committee encourages the honey industry to consult the Health Star Rating Advisory Committee regarding the categorisation of honey in the Health Star Rating System to ensure that honey is treated appropriately under this system.

4.36 Australia needs a comprehensive, cross-portfolio approach to beekeeping and pollination. These industries are absolutely fundamental to our economy because of their role in food production.

Senator Glenn Sterle
Chair

54 Beechworth Honey Group, *Submission 52,* pp 13–14.

55 NSW Apiarists Association, *Submission 58,* p. 20.

Additional Comments

Nick Xenophon, Independent Senator for South Australia

'Not enough sting in the tail'

1.1 While I am generally supportive of the comments in the committee report, I am concerned that the committee should not minimise the role of government in these vitally important issues by offering in some instances general statements and suggestions rather than firm recommendations. Given one of the main reasons behind calling for this inquiry was a lack of action from previous inquiries, including the More Than Honey report in 2008, I believe it would be incredibly disappointing for both the participants in this inquiry and the broader industry to see that the committee has not seen fit to make strong recommendations about a necessary course of action.

1.2 Australia's beekeeping and pollination industries are, quite literally, 'more than honey'. As the committee report notes, both the honey production and pollination industries are worth billions of dollars to the Australian food production industry, both in terms of direct and flow-on benefits. It is worth repeating the statistics from the Food and Agriculture Organisation of the United Nations:

> …out of some 100 crop species which provide 90% of food worldwide, 71 of these are bee-pollinated. In Europe alone, 84% of the 264 crop species are animal pollinated and 4 000 vegetable varieties exist thanks to pollination by bees. The production value of one tonne of pollinator-dependent crop is approximately five times higher than one of those crop categories that do not depend on insects.[1]

1.3 The committee report also notes that bee pollination improves the efficiency of crop production, and therefore has both financial and environmental benefits way beyond the immediate cost.

1.4 It is important to note the high level of public and industry interest in this inquiry. I believe it is generally acknowledged that there needs to be urgent and significant action to protect Australia's bee population and its associated industries and benefits, and I am concerned that this report does not adequately reflect that will.

1.5 There has also been a significant amount of media coverage of these issues recently, including a series of articles in response to the committee inquiry. These have covered a wide range of issues, including the importance of bees to the agricultural industry, the need for better labelling from a consumer point of view, and the state of the industry as a whole. A more recent article in *The Australian* discussed the potential shortage of honey due to a poor summer season, with production halved

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1 United Nations Environment Programme, *Global Honey Bee Colony Disorders and other Threats to Insect Pollinators*, 2010, p. 1.

in some areas and with losses of up to 90 per cent in others.[2] These issues have clearly struck a chord with the broader community as well as industry.

1.6 The committee report also outlines the significant challenges facing the beekeeping and pollination industries, and in particular the possible side-effects of pesticide use on bee populations. I note that the Government is currently seeking to change the re-registration process for chemicals through the APVMA, and that this change could lead to reduced oversight. Further, as the committee report notes, concerns were raised about the independence of information provided to the APVMA.

1.7 Recommendation: The Government postpone any changes to the re-registration process until specific enforceable requirements are in place relating to the independence of information provided to the APVMA regarding agvet chemicals, and that the registration and re-registration processes require testing on the effect of long term exposure to these chemicals on native bees and honey bees.

1.8 In my view, the committee report presents a compelling argument for the need for a more in-depth consideration and review of pesticide impacts on bees. I note that there is significant support for the establishment of a national honey bee survey scheme to inform the debate on these issues, and I welcome the committee's recommendation that:

> **The Commonwealth should, as a matter of urgency, in consultation with relevant industry participants and with consideration to world's best practice, develop and establish a national honey bee colony survey scheme to collect reliable and comprehensive data about the industry and inform future decisions. The survey should include the establishment of a residue monitoring project to analyse pesticide residues in plant and bee media.**

1.9 However I believe the committee could have gone further in its recommendation in relation to spraying, particularly where off-label chemicals are used.

1.10 Recommendation: The APVMA and/or EPA implement specific 'no spray' zones for chemicals where hives are located or bees are foraging, with particular attention to the off-label use of chemicals.

1.11 I note that the Department of Agriculture advised the committee that it is currently progressing work in relation to the labelling of chemicals that may impact on bees. I also note, however, that this work commenced in 2012 and the most recent update provided to the committee related to consultation that took place nearly a year ago. In my view, this is unacceptable. I am very concerned that the committee has not made a stronger recommendation in this regard, and instead is happy to monitor the situation and 'look forward' to receiving information from the relevant agencies. I believe the committee has taken the wrong course on this: it is clear that the time for

2 Neals, Sue 'Consumers asked to keep fingers out of the honey jar', *The Australian*, 23 June 2014

waiting has passed, and that the information in this report makes it painfully obvious that action must be taken now as a matter of urgency.

1.12 Recommendation: The Department of Agriculture and other relevant agencies hand down their recommendations in relation to the labelling of chemicals that may impact bee health within the next two months, to be implemented before the end of 2014.

1.13 Forest and fire management and clear fell harvesting issues also have an impact on the industry. Again, I agree with the discussion of the issues in the committee's report, but the urgency of these matters is not reflected in the committee's comments. Given that this is an unfulfilled recommendation from the 2008 *More Than Honey* report, the committee would have been justified in taking a stronger line.

1.14 Recommendation: The Commonwealth enter into discussions with the relevant state and territory bodies to ensure integrated fire management practices that take into account the needs of the beekeeping industry are in place within the next 12 months.

1.15 Recommendation: State and territory land management authorities review the impact of clear fell harvesting in areas that overlay bee sites and restrict these activities accordingly.

1.16 The sparse allocation of state apiculture staff also emphasises the low priority given to the industry by governments at all levels. This lack of resources is putting the industry at unacceptable risk, and should not be allowed to continue.

1.17 I also endorse the comments of Dr Max Whitten of the Wheen Bee Foundation in relation to levies and biosecurity resources:

> "Who paid for that before? The states, so the states were paying through their apiary offices for the service which now this small struggling industry is being forced to pay…What we have really got, when you look at the biosecurity situation, is the struggling beekeepers are footing the bill to solve problems not of their making and producing benefits which are captured by others."[3]

1.18 While I support the committee's second recommendation in principle, I am concerned that this is moving too much towards a 'cost recovery' model, where industry foots the bill for services previously provided by the government. It is my view that cost recovery is contrary to the interests of industry, particularly where that industry provides a massive net benefit to the economy, as bees do through their role in pollination. It is my view that, while expanding the capacity to charge a levy for pollination services will be useful, this should not be the sole method of supporting further research or biosecurity measures.

1.19 These concerns also apply to the committee's comments that the industry should expand its marketing activities. With respect to the committee, this is an industry that is vital to Australia but which is struggling to survive. While I am sure

3 Dr Maxwell Whitten, *Committee Hansard*, 20 May 2014, pp 20– 21.

they would benefit from expanded marketing activities, industry participants are not in a position to foot the bill and need government assistance at all levels to carry out these activities. To put the responsibility solely on the industry assumes it is in a position to carry out these activities, which it is not. This is a unique industry with unique and vital importance to Australia, and should be treated as such.

1.20 Recommendation: As part of a comprehensive approach to revitalising the beekeeping and pollination industries, the Department of Agriculture and relevant state and territories bodies should actively seek to support the industries in a variety of activities, including marketing.

1.21 The committee report also outlines significant concerns in relation to biosecurity measures, particularly in relation to dealing with incursions of the Asian Honey Bee or varroa mite. While it is widely acknowledged that incursions of either type could be catastrophic for the industry, very little is being done to manage the risk or deal with it if it occurs. The Department of Agriculture's own figures indicate that 95-100 per cent of unmanaged hives in Europe and the United States were destroyed within three to four years of a varroa mite infestation.[4] Other research suggests that almost all feral and wild bee populations in Australia would be exterminated in a varroa infestation.[5] Despite these terrifying statistics, the Department of Agriculture revealed that varroa has not yet been categorised by Plant Health Australia and so the amount and structure of funding to fight an incursion is unknown.[6] This is outrageous and simply unacceptable. I fully support the committee's recommendation that:

> **The categorisation of varroa destructor be completed as a matter of urgency to provide industry with funding certainty in case of an incursion.**

1.23 A vital component of being able to combat an incursion is introducing varroa-resistant bee stock as a matter of urgency. As the committee report notes, this is possible either through the importation of bees or of bee semen, and that the *More Than Honey* report recommended that an import risk analysis for bee semen be completed by the end of 2008. This has not yet been completed, and I support the committee's recommendation in relation to this matter.

1.24 While I support the committee's recommendation in relation to the production of an annual industry report, it is important to acknowledge that such a report will have no value if there is not the will and resources available to act on the information it contains. I am concerned that both of these are absent in all levels of government.

1.25 Food labelling is an unnecessarily vexed issue. Despite multiple reviews and inquiries, there has been little action to improve labelling standards. The current system is bad for both consumers and producers, but it seems that successive

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4 Department of Agriculture, *A honey bee industry and pollination continuity strategy should Varroa become established in Australia*, May 2011, p. iii.

5 Dr Doug Somerville, Committee Hansard, 15 April 2014, pp 55–56.

6 Department of Agriculture, *Answers to Question on Notice*, p. 5.

governments have been more willing to listen to major retailers and importers than Australian consumers and businesses.

1.26 As the committee report correctly identifies, labelling issues generally fall into the categories of country of origin labelling and ingredient issues. In some respects, honey has one of the more stringent ingredient labelling requirements, but again the system falls down in relation to enforcement. While I acknowledge that the ACCC has recently dealt with some mislabelled products, it is often a long and difficult process that relies on other producers or members of the public reporting problems to the regulator, rather than a more pre-emptive system.

1.27 Unfortunately, the committee report does not make any meaningful recommendations in relation to labelling improvements. Instead, the report points to previous inquiries, without acknowledging that very little has come of these. There is significant appetite from both consumers and Australian producers for labelling laws to be improved, and I hope that the current House of Representatives Committee inquiry will finally see some action on that front, together with any bills introduced into the Senate.

1.28 Ultimately, the committee report does an excellent job of exploring and, for the most part, recognising the concerns of the beekeeping and pollination industries. However, it lets the industry down by not issuing sufficiently firm recommendations, or acknowledging that previous inquiries have not been acted on. In my view, Australia needs a comprehensive, cross-portfolio approach to beekeeping and pollination. These industries are absolutely fundamental to our economy because of their role in food production. If we do not take care of these industries, the devastation will stretch far further than a honey shortage; it will severely impact on our ability to feed ourselves.

1.29 Recommendation: As a matter of utmost urgency the Government, including the Department of Agriculture and other relevant agencies, work with industry groups and state and territory governments to develop an Australia-wide approach to protect and support the beekeeping and pollination industries. This should involve a report and action within 6 months.

NICK XENOPHON

Appendix 1

Submissions received

Submission Number	Submitter
1	Mr Vinesh Chand
2	Mr Malcolm Porter
3	Ms Manu Saunders
4	South Australian Apiarists' Association Inc
5	Central Tablelands Branch
6	Superbee Honey Factory
7	Mr Ken Gell
8	Mr Don McArthur
9	Mr Dan Heard
10	Mr Thomas Sharman
11	Rural Industries Research and Development Corporation
12	Mr Rod Yates
13	Lucerne Australia
14	Crop Pollination Association Inc (Vic)
15	Professor Madeleine Beekman
16	Mr Harold Saxvik
17	Mr Anthony James Eden
18	Mr Peter Warhurst
19	Mr Stephen Targett
20	Mr Roland S. Inman
21	Ms Nicci Neil
22	Costa
23	Ms Janet Sutherland
24	Apple and Pear Australia Limited
25	Mr Chris Berkeley
26	Mr Leo Kuter
27	Ms Corinne Jordan
28	Dr Doug Somerville
29	Mr Daryl Brenton
30	Mr David and Wendy Mumford
31	Mr Leigh Duffield
32	Queensland Beekeepers’ Association
33	Mr Jonathan Williams
34	Mr Ken Grossman
35	Mr Michael and Kylie Pitt
36	Mr Robert Johnstone
37	Plant Health Australia
38	Mr Graham Connell
39	Capilano Honey Ltd

40 Victorian Apiarists' Association Inc
41 CSIRO
42 Mr David & Mrs Leilani Leyland
43 Mr Gary Montgomery
44 Mr John Edmonds
45 Mr Warren Jones
46 Mr NJ & KD Fewster
47 Tasmanian Beekeepers' Association lnc
48 Mr Trevor Monson
49 Australian Queen Bee Exporters Pty. Ltd.
50 Burnett Beekeeping Supplies
51 Australian Food and Grocery Council
52 Beechworth Honey Group
53 Central Victorian Apiarists Association Inc
54 CropLife Australia
55 Growcom
56 Ms Serena Dorf
57 Mr Terry Brown
58 NSW Apiarists' Association
59 Mr David Severino
60 Ipswich and West Moreton Beekeepers Association
61 Victorian Apiarists' Association Inc Melbourne Section
62 Ms Fiona Marantelli
63 Australian Honey Bee Industry Council Inc
64 Mr Bryn Jones
65 Wheen Bee Foundation Ltd
66 National Farmers' Federation
67 Mr Moss MacGibbon and Mr Andrew McCallum
68 Mr Mike and Mr Ken Spurge
69 Mr Kevin MacGibbon
70 Tasmanian Farmers and Graziers Association
71 NSW Department of Primary Industries
72 WAFarmers
73 Mr Ron Clark
74 AUSVEG
75 VFF State Beekeeping Branch
76 Mr Dave Elson
77 NSW Apiarists Association Sydney Branch
78 Tasmanian Department of Primary Industries, Parks, Water and Environment
79 Department of Agriculture
80 Fresh Start Visas
81 Biodynamics Sydney

Additional information received

- Received on 21 January 2014, from Dr Beth Woods, Acting Director-General, Queensland Department of Agriculture, Fisheries and Forestry. Correspondence.
- Received on 15 April 2014, from the South Australian Apiarists' Association. Answer to Questions taken on Notice on 15 April 2014.
- Received on 16 April 2014, from the Australian Honey Bee Industry Council. Answer to Questions taken on Notice on 15 April 2014.
- Received on 24 April 2014, from Mr Trevor Monson. Answer to Questions taken on Notice on 15 April 2014.
- Received on 24 April 2014, from Mr Trevor Monson. Additional information.
- Received on 8 May 2014, from Mr Leigh Duffield. Correspondence to the Committee clarfying statements made at 15 April 2014 hearing.
- Received on 13 May 2014, from the Australian Competition & Consumer Commission. Correspondence.
- Received on 14 May 2014, from Dr Doug Somerville. Answers to Questions taken on Notice on 15 April 2014.
- Received on 26 May 2014, from the Australian Honey Bee Industry Council. Answer to Questions taken on Notice on 20 May 2014.
- Received on 27 May 2014, from the Australian Honey Bee Industry Council. Answers to Questions taken on Notice on 20 May 2014.
- Received on 28 May 2014, from Food Standards Australia and New Zealand. Answers to Questions taken on Notice on 20 May 2014.
- Received on 28 May 2014, from Food Standards Australia and New Zealand. Answers to Written Questions taken on Notice on 20 May 2014.
- Received on 29 May 2014, from the NSW Apiarists' Association. Additional information.
- Received on 30 May 2014, from Mr Leigh Duffield. Answer to Questions taken on Notice on 15 April 2014.
- Received on 30 May 2014, from Dr Denis Anderson. Answer to Questions taken on Notice on 20 May 2014.
- Received on 3 June 2014, from the Department of Agriculture. Answers to Questions taken on Notice on 20 May 2014.
- Received on 3 June 2014, from the Department of Agriculture. Answers to Written Questions taken on Notice on 20 May 2014.
- Received on 4 June 2014, from the Wheen Bee Foundation. Answers to Questions taken on Notice on 20 May 2014.
- Received on 4 June 2014, from the Australian Pesticidies and Veterinary Medecines Authority. Answer to Questions taken on Notice on 20 May 2014.
- Received on 4 June 2014, from the Australian Pesticidies and Veterinary Medecines Authority. Answer to Written Questions taken on Notice on 20 May 2014.
- Received on 6 July 2014, from the Australian Honey Bee Industry Council. Additional information.

TABLED DOCUMENTS

15 April 2014, Murray Bridge, SA:

- Tabled by Mr Warrick Thorpe, Chairman, Lucerne Australia. RIRDC Report ' Economic Analysis of the Australian Lucerne Seed Industry'
- Tabled by Mr Trevor Monson, Director, Monsons Honey & Pollination.
    - Opening Statement
    - Stigma Development and Receptivity in Almond
    - Fungicide Sprays can Injure the Stigmatic Surface During Receptivity in Almond Flowers
    - Fungicides can reduce, hinder pollination potential of honey bees
    - Protecting Honey Bees from Chemical Pesticides

20 May 2014, Brisbane, QLD:

- Tabled by Mr Trevor Weatherhead, Chief Executive Officer, Australian Honey Bee Industry Council. Three pictures.

Appendix 2

Public hearings and witnesses

15 April 2014, Murray Bridge, SA

- DUFFIELD, Mr Leigh,
  Private capacity
- GOLDSWORTHY, Mrs Jodie,
  Private capacity
- HOOPER, Mr Benjamin Allan, Spokesperson, Executive Council,
  South Australian Apiarists Association Incorporated
- JOHNSTONE, Mr Robert Elliot,
  Private capacity
- MONSON, Mr Trevor John, Director,
  Monsons Honey & Pollination
- PITT, Mr Michael George, Member, Executive Council,
  South Australian Apiarists Association Incorporated
- ROBERTS, Mr Ian Jeffrey, Chairperson, Executive Council,
  South Australian Apiarists Association Incorporated
- SOMERVILLE, Dr Douglas, Technical Specialist, Honey Bees,
  New South Wales Department of Primary Industries
- THORPE, Mr Warrick Stewart, Chairman,
  Lucerne Australia
- ZADOW, Mr Ian Mark, Chairman,
  Australian Honey Bee Industry Council

20 May 2014, Brisbane, QLD

- ANDERSON, Dr Denis,
  Private capacity
- BHULA, Dr Raj, Executive Director, Pesticides,
  Australian Pesticides and Veterinary Medicines Authority
- BLAIR, Dr Shona, Chief Executive Officer,
  Wheen Bee Foundation
- COOPER, Mr Colin Casey, President,
  New South Wales Apiarists Association
- DAVIES, Dr Les, Chief Regulatory Scientist,
  Australian Pesticides and Veterinary Medicines Authority
- ELSON, Mr David,
  beekeeper
- GRANT, Dr Colin, First Assistant Secretary, Post Entry Quarantine Program
  Department of Agriculture

- JONES, Mr Daniel, Vice-President,
  Queensland Beekeepers Association
- MAY, Mr Peter, General Manager, Legal and Regulatory Affairs,
  Food Standards Australia New Zealand
- McKEE, Dr Benjamin, Managing Director,
  Capilano Honey Ltd
- NIXON, Mr Paul, Acting Assistant Secretary, Compliance Division,
  Department of Agriculture
- OTTESEN, Mr Peter, Assistant Secretary, Crops, Horticulture and Wine Branch, Department of Agriculture
- TAYLOR, Mr Warren, Managing Director,
  Australian Queen Bee Exporters
- WEATHERHEAD, Mr Trevor Francis, Executive Director,
  Australian Honey Bee Industry Council Inc.
- WHITTEN, Dr Maxwell John, Chairman of Board,
  Wheen Bee Foundation

Appendix 3

Honey bee dependence for pollination of selected crops

(as percentage of yield)

Crop	Dependence %	Crop	Dependence %
Tree crops		*Vine crops*	
Almond	100	Blueberry	100
Apple	100	Cucumber	100
Apricot	70	Kiwi	80
Avocado	100	Pumpkin	100
Cherries	90	Rock melon	100
Citrus [a]	30 – 80	Squash	10
Grapefruit	80	Water melon	70
Lemon & Lime	20		
Macadamia	90	*Seed production*	
Mandarin	30	Beans	10
Mango	90	Broccoli	100
Nectarine	60	Brussels sprout	100
Orange	30	Cabbage	100
Papaya	20	Canola	100
Peach	60	Carrot	100
Pear [a]	50 – 100	Cauliflower	100
Plum & Prune	70	Celery	100
		Clover	100
Ground crops		Lucerne	100
Peanut	10	Mustard	100
		Onions	100
Broad acre crops			
Canola	15	Soy	10
Cotton	10	Sunflower [a]	30 - 100

Source: Monck, Gordon, Hanslow, Rural Industries Research and Development Corporation, *Analysis of the Market for Pollination Services in Australia*, May 2008, p. 2.