



Commercial apiary industry biosecurity management in NSW

## Operation Plains Wanderer | Hillston & District apiary pollination

### Purpose

The almond industry relies on apiarists to assist with the pollination of trees to produce nut crops. In 2017, the Australian almond industry was worth \$429 million. A total of 39,662 hectares was planted to almonds at this time, which produced 79,461 tonne of crop.

The Hillston and Griffith districts have a large commercial almond industry and each year the planting area is expanding by 30%.

This local pollination event saw approximately 30,000 hives from NSW, Victoria, South Australia and Queensland coming into the area to participate. The convergence of such a large number of hives increases the biosecurity risks to all apiarists' hives involved in the event. Weak or poorly managed hives present a potential source of pests and disease.

Operation Plains Wanderer was carried out by Biosecurity & Food Safety Compliance officers. It was developed to unite bee brokers, apiary inspectors and Bee Biosecurity Officers (BBOs) to assess the biosecurity risk of beekeeper's bringing weak and diseased hives to this intensive pollination event.

### Background

Weak and diseased beehives have the potential to be robbed by healthy bees. This increases the risk of brood diseases, such as American Foul Brood (AFB), spreading to other hives located within flight range.

The *Biosecurity Act 2015* and the *Biosecurity Regulation 2017* allows the NSW Department of Primary Industries (DPI) to take compliance and enforcement action against beekeepers to ensure biosecurity threats are managed and risks are mitigated against their [general biosecurity duty](#).

This operation aimed to raise awareness, provide education and undertake enforcement action against beekeepers that posed a biosecurity risk to other apiarists.

### What we did

The purpose of the operation was to inspect live bee colonies for notifiable contagious brood diseases and to take appropriate compliance action if any diseases were identified.

In August 2018, a total of 582 brood inspections were carried out on hives in 41 locations within the Hillston and Griffith almond orchards as outlined below:

Griffith	4	149
Mooral	8	2,015
Yilgah	25	4,533
Tabbita	1	396
Tocabil	2	486
Nericon	1	120
<b>TOTAL</b>	<b>41</b>	<b>7,416</b>

Of the 30,000 hives at the pollination event, 25,000 were owned by NSW apiarists.

### **Key biosecurity indicators**

Biosecurity and Food Safety Compliance officers assessed the following key biosecurity indicators during on-site inspections to determine if there was a biosecurity risk present:

- Was there any evidence of disease or pests present during the brood inspection?
- Did the weak or diseased hives pose a biosecurity risk to surrounding apiarist's hives?
- Where surrounding apiaries in a state of neglect, or were they being managed appropriately to minimise and manage a biosecurity risk?

Following inspection, apiaries where deemed as either posing or not posing a biosecurity risk.

During inspection, apiaries were sampled for the presence of AFB as shown in the image below.



### **What we found**

#### **Inspection results**

Of the 41 apiaries inspected:

- **36** (87%) posed no biosecurity risk;
- **5** (13%) posed a significant biosecurity risk.

The majority of apiaries inspected were not deemed to pose a biosecurity risk for the following reasons:

- a management plan was already in place; e.g. the weak hives inspected on a previous audit by the broker were moved to a location that posed no risk to surrounding apiaries;
- weak hives were made bee proof and did not require intervention.

#### **Compliance and enforcement action**

The following compliance and enforcement action was taken during Operation Plains Wanderer:

- Five (5) records of interview will be conducted in relation to non-compliances identified, and
- Three (3) apiaries were found not to be complying with administrative requirements (e.g. notification, hive identification).

The following action was taken in relation to these non-compliances:

Penalty notices	5
Biosecurity Direction	2
Written warning	1

### **Strategies to manage biosecurity risk**

Biosecurity and Food Safety Compliance officers proposed the following strategies to owners of the apiaries identified as posing a biosecurity risk in a bid to mitigate these risks:

- ongoing disease surveillance programs;
- regular suspect brood sample and honey tests;
- removing and culling weak hives from loads going to pollination events;
- compilation of management plans with DPI's Bee Biosecurity Officer (BBO);
- disease spread mitigation, such as bee proofing affected hives.

### **Taking remedial action**

The image below shows the remedial action of bee proofing as a hive was found dead in the apiary. Bee proofing in the field helps to eliminate the risk of robbing, minimising the potential of disease transmission.

### **Outcomes**

Operation Plains Wanderer was successful in identifying and minimising or eliminating several biosecurity risks associated with notifiable apiary diseases. The operation was also successful in bringing together the efforts of the apiary industry and orchardists to address the risks with this pollination event.

Inspections by DPI provided sufficient motivation for some work to be undertaken by apiarists to satisfy the

requirements of minimising a biosecurity risk. In other cases, enforcement sanctions were issued to assist in addressing biosecurity risks.

The operation raised awareness with the stakeholders involved of the need to continue to mitigate biosecurity risks in relation to pollination activities.

Commercial apiarists subject to inspections now have a better understanding of their requirements in relation to the *Biosecurity Act 2015* and their general biosecurity duty.

### **Next steps**

As part of the ongoing strategy to manage notifiable apiary disease, DPI will undertake future operations to support regular surveillance activities undertaken by the local compliance staff.

### **More information**

For further information visit:

<https://www.dpi.nsw.gov.au/biosecurity>

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