

## Commercial apiary industry biosecurity management in NSW

### Operation Beehave | North Coast apiary pollination inspections 2018

#### Purpose

Operation Beehave was carried out to assess the effectiveness of pollination services provided to blueberry farming operations in and around the Coffs Harbour region in NSW.

The operation was conducted by Biosecurity & Food Safety Compliance officers and focused on:

- inspecting live bee colonies for notifiable contagious brood diseases; and
- checking compliance with registration requirements under the *Biosecurity Regulation 2017*.

#### 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. This may have a significant impact on the productivity of the NSW apiary industry.

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

In September 2018, a total of 87 brood inspections were carried out from a total of 450 hives on blueberry farms in both the Coffs Harbour and Clarence Valley Local Government Areas. These inspections were carried out on a total of 18 apiaries, representing 10 beekeepers.

The image below shows Biosecurity & Food Safety Compliance Officers inspecting a frame.



#### 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 disease or pests present at the apiary?
- Did the apiary pose a biosecurity risk to surrounding apiaries?
- Were the beehives in a state of neglect or abandonment, or were they being managed appropriately to minimise and manage a biosecurity risk?
- Were the hives of sufficient strength to provide adequate pollination?
- Were the hives identified with the owner's registration number?
- Is the owner of the hives registered?

## What we found

### Inspection results

Of the 18 apiaries (87 hives) inspected during Operation Beehave:

- **72%** posed no biosecurity risk;
- **28%** posed a significant biosecurity risk.

The majority of apiaries inspected were not deemed to pose a biosecurity risk as there was no indication of pest, disease or neglect. However, weak hives infected with AFB were determined to be a significant biosecurity risk.

A total of 5 apiary sites (representing 3 beekeepers) showed symptoms of AFB. During inspection, apiaries were sampled for the presence of AFB (as shown in the image below) which was later confirmed by laboratory examination.



One bee keeper was found not to be complying with registration requirements.

As with a similar operation in 2017, hive strength was assessed as an indicator of the effectiveness of hives to provide pollination.

Of the hives assessed, 40% were found to have good or excellent hive strength. These results can be compared to with results from previous operations to gauge the long-term effectiveness of government and industry programs.

### Compliance and enforcement action

The following compliance and enforcement action was taken during Operation Beehave:

- Three (3) apiaries that presented a biosecurity risk offered a Biosecurity Undertaking as well issued with written warnings for failing to comply with disease notification requirements.
- One (1) beekeeper was found to be unregistered and proceeded to register their hives within 7 days.

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

Action/Sanction issued	Number of Beekeepers
Biosecurity Undertaking	3
Written warning	3
Penalty Notice	1

### Strategies to manage biosecurity risk

Biosecurity and Food Safety Compliance officers proposed the following strategies for beekeepers 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.

## Outcomes

Operation Beehave was successful in identifying beekeepers who fail to comply with their Biosecurity Duty associated with the monitoring and reporting of notifiable disease within apiaries. This followed a similar operation in 2017 which found 24% of apiaries posed a biosecurity risk.

Operation Beehave showed a significant improvement in hive strength from 20% of hives being assessed as strong in 2017 to 40% in 2018. This can be attributed to several factors, such as government education programs and compliance operations, as well as industry programs.

In response to results from the 2017 operation a large blueberry grower has implemented independent auditing of hives supplied for pollination along with contracts between the blueberry grower and pollination provider.

## Next steps

With the expansion of the blueberry industry likely to continue, and a lack of contract pollination providers in the area, some blueberry farmers are opting to buy their own hives.

DPI strongly urges any grower new to beekeeping to undergo training in beekeeping management and disease control which offered through [Tocal College](#).

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. DPI will continue to engage with the local beekeeping and blueberry industries.

## More information

For further information visit:

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

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