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1. Welcome

from Board Chairman Russell Marsh & National Compliance Manager Clifton King

2020/21 has been a transformational year for The Management Agency. We're continually striving to better support beekeepers in their fight against AFB and 2020/21 was a year of significant improvement. We focussed on developing core capabilities and modernising our systems to support New Zealand's AFB elimination plan into the future. This has optimised both effectiveness and efficiency.

The provision of the apiary register and other services were transferred from AsureQuality to The Management Agency in July 2020. The in-house team we formed in response is committed to supporting beekeepers to implement the National American Foulbrood Pest Management Plan (NPMP). This increased capacity enabled our team to focus on supporting beekeepers in their fight against AFB.

The change also enabled improved intelligence sharing and coordinated response to ensure that individual beekeepers receive the support they need and that suspected cases of noncompliance are identified and investigated. An important part of this is swiftly responding to, and acting on, beekeeper requests and we are proud to have received overwhelmingly positive feedback. All while navigating the complexities of a COVID-19 world.

In July 2020 we initiated the development of HiveHub which went live on 11 March 2021. This was the culmination of nine months' work by The Management Agency's entire team, a group of beekeepers, and our external development team. The new purpose-built system is modern, user friendly, and it makes compliance and reporting easy.

These positive changes have built on other improvements made in recent years, including increasing the number of contracted AP2s and boosting our rates of inspection and enforcement. Together, these changes build the foundation on which The Management Agency will support beekeepers in their fight against AFB into the future.

In June 2021 we initiated a review of the National American Foulbrood Pest Management Plan. The Plan was designed by beekeepers for beekeepers in the 1990s and we need your input to ensure that it meets the requirements of New Zealand's beekeeping industry for the next 10 years. This review includes extensive consultation, providing beekeepers with the opportunity to tell us what the next 10 years of the National American Foulbrood Pest Management Plan should look like.

Thank you to the 434 beekeepers who made submissions during the first round of consultation. Your feedback provided insight into opportunities to make both legislative and operational improvements to the National American Foulbrood Pest Management Plan. The second round of consultation will provide beekeepers with the opportunity to consider proposed legislative improvements identified from the first round of consultation. We will then prepare a detailed proposal to amend the legislation. Round three will occur in the middle of 2022 when we consult with beekeepers before submitting the detailed proposal to the Minister for Biosecurity.

Special thank you to our staff, contractors, and all beekeepers who make the effort to eliminate AFB from their beehives. Your commitment makes all the difference, and we look forward to working with you over the coming year.

Russell Marsh

Chairman

National Compliance Manager

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2. Objectives

of the National American Foulbrood Pest Management Plan

The Biosecurity (National American Foulbrood Pest Management Plan) Order 1998 (NPMP) specifies the legal obligations and powers for the management of AFB in New Zealand. The current NPMP was amended on 18 September 2012 and supersedes the original NPMP made on 7 September 1998.

The primary objective of the NPMP is to manage AFB to reduce the reported incidence of American foulbrood by an average of 5% each year in managed beehives.

The secondary objectives of the NPMP are:

- To locate all places where beehives are situated and ensure that each honeybee colony is inspected at least once each year for American foulbrood.
- To identify American foulbrood cases in beehives.
- To eliminate American foulbrood in beehives by destroying any American foulbrood cases and associated bee products and destroying or sterilising associated appliances.

Under the NPMP, beekeepers are responsible for eliminating AFB from their beehives. The cumulative effect of all beekeepers eliminating AFB from their beehives will be the elimination of clinical AFB from managed colonies in New Zealand.

The NPMP specifies the minimum AFB elimination obligations for all beekeepers in New Zealand through NPMP rules and provides beekeepers with the opportunity to make a greater commitment to AFB elimination through entering into a Disease Elimination Conformity Agreement (DECA) with The Management Agency. In recognition of this commitment, The Management Agency provides an exemption from Certificate of Inspection (COI) obligations and may also permit the salvage of appliances through sterilisation.

The Management Agency is responsible for monitoring and auditing beekeeper compliance with NPMP rules. We are also responsible for monitoring and auditing the AFB elimination performance of beekeepers who have entered into a DECA with The Management Agency. The NPMP provides The Management Agency with legal powers to enforce the implementation of the NPMP.

3. Reported Incidence

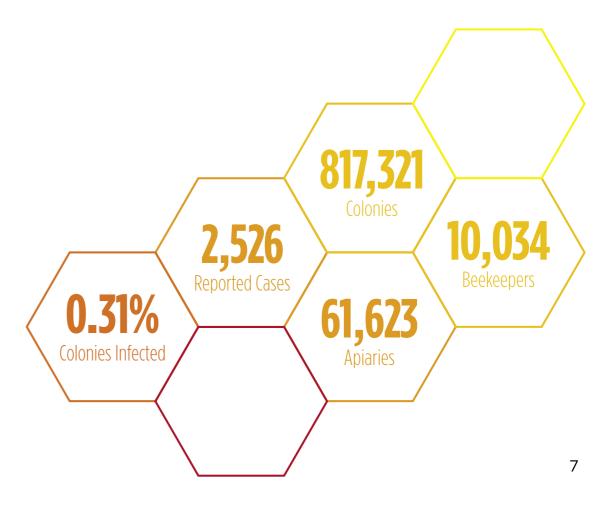
of American Foulbrood over a 12 month period

In the 12 months to 31 May 2021, 2,526 cases (0.31% of colonies) of AFB were notified, compared with 2,783 cases (0.32% of colonies) of AFB notified in the 12 months to 31 May 2020. The substantial drop in the number of colonies notified with AFB (257 cases) has only resulted in a small reduction in the percentage of colonies infected by AFB (0.01% of colonies) due to the national decline in colony numbers.

The annual reported incidence of AFB since 1998 is shown in Figure 1. The reported incidence of AFB increased from 0.18% of colonies in 2012, when the NPMP was last amended, to 0.33% in 2017. This was in response to rapid industry growth. The annual incidence of AFB has stabilised since 2017 with a slight downward trend.

The number of colonies has dropped to 817,321 from a peak of 924,973 in 2019. The number of registered beekeepers and apiaries has continued to grow slowly with 10,034 registered beekeepers and 61,623 registered apiaries in 2021 (Figure 2).

Looking forward, the Management Agency board and team are committed to continuing effective and efficient implementation of the NPMP alongside New Zealand beekeepers.

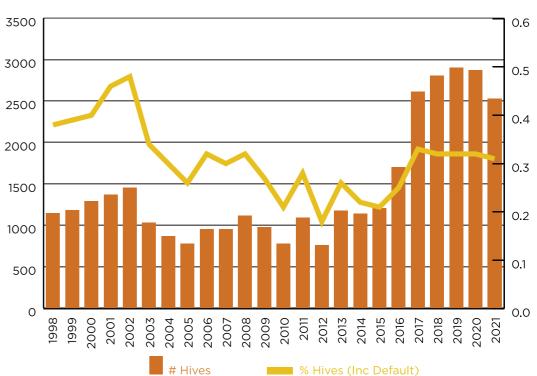


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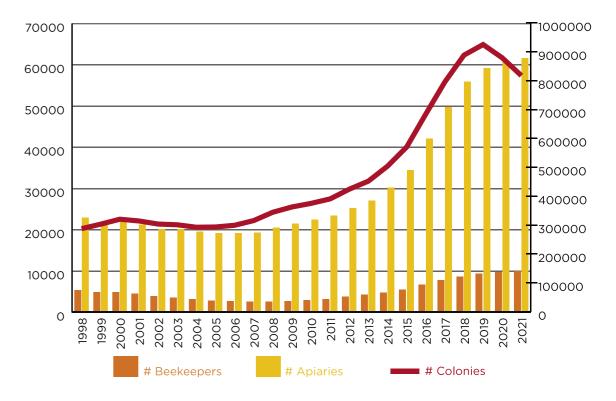
Reported incidence of AFB, 1998 to 2021





Beekeeper, Apiary and Colony Statistics, 1998 to 2021

Figure 2



4. Progress Update

Implementation of the National American Foulbrood Pest Management Plan

The Management Agency continued to implement the National American Foulbrood Pest Management Plan in 2020/21 while focusing on building our core capability, capacity, and systems for implementation into the future.

A total of 2,186 apiaries were inspected in 2020/21, a significant increase from 1,524 in 2019/20. Of those inspected, 2.4% of beehives and 9.1% of apiaries were found to have cases of AFB. An additional 13 high-risk beekeeping operations were identified with AFB in more than 10% of beehives. The Management Agency's enforcement actions resulted in the destruction of 320 AFB beehives owned by these 13 beekeepers and from a further 9 high-risk beekeeping operations identified in previous years.

Bringing AFB elimination in-house

The provision of the apiary register and several other elimination-related services transitioned from AsureQuality to The Management Agency in July 2020. A month prior, in June 2020, The Management Agency team of Marco Gonzalez, Janette Gwilliam, and Clifton King grew to accommodate this new workload and sharpened focus. We were joined by Tracey Gonzalez and Leonie Elliot-Mason as Apiary Coordinators and Dwayne Hill who covers the northern region as an additional Operations Manager.

The new team dedicated its focus to supporting beekeepers. Of note, we have received positive feedback relating to timely responses and action taken in response to beekeeper requests. This includes general assistance requests and notifications of suspected non-compliant behaviour.

HiveHub

Our new compliance system, HiveHub, went live on 11 March 2021. This was the culmination of a 9-month project to replace outdated ApiWeb (developed in 2011), the Apiary Database (developed in 1994), and numerous manual systems.

Over 2,000 beekeepers logged into HiveHub within the first 24 hours. Over 90% of registered beekeepers are currently using HiveHub. Thanks to HiveHub, it's now easy for beekeepers to comply with their regulatory obligations. We have already witnessed a 16% increase in beekeepers submitting their Annual Disease Returns on time and a 50% reduction in ADR non-compliance rates.

In The Management Agency's back office, HiveHub supports a range of critical processes. This enables The Management Agency staff to spend less time on administration and more time assisting beekeepers in their fight against AFB.

Our commitment

We remain committed to eliminating clinical AFB from managed colonies in New Zealand. An important part of this process is ensuring that compliant beekeepers are not adversely affected by non-compliant neighbours. We will continue to work closely with beekeepers and exercise our full range of legal powers to achieve a reality where clinical AFB no longer exists in the beekeeping industry.

"We're committed to supporting New Zealand beekeepers as they eliminate clinical AFB."

5. Recognition Training

of American Foulbrood

While COVID-19 reduced the number of training courses available this past year, education remains a priority for the Management Agency.

It is vital that all beekeepers are aware of their obligations and have the required knowledge to eliminate AFB. The Management Agency offers education through AFB recognition and refresher courses and maintains a wealth of information outlining beekeeper obligations and guidance on how to eliminate AFB on the afb.org.nz website. We present to beekeeping groups around the country and respond to all beekeeper enquiries via phone and email.

The Management Agency ran 49 AFB recognition courses in the year to 31 May 2021. 72 beekeepers attended these courses as a refresher and 776 sat the AFB recognition test with 709 beekeepers (91%) passing the course test at the first attempt. An additional 67 beekeepers sat and passed the test by proctor without attending the course.

1 AFB refresher course was run in the year to 31 May 2021. This was attended by 20 beekeepers.



6. Monitoring & **Auditing Beekeepers'**

Elimination of AFB from their Beehives

The Management Agency monitors progress toward the achievement of NPMP objectives by monitoring and auditing the AFB elimination actions of beekeepers (notifications and statements described in Figure 3) in addition to monitoring the annual reported incidence of AFB. The Management Agency pays particular attention to the absence of beekeeper notifications and statements including:

- Notification of places as apiaries
- Annual Disease Returns
- Certificates of Inspection
- Notification of AFB

Unregistered Apiaries

The Management Agency investigates all reports for suspected unregistered apiaries. 258 unregistered apiaries were identified in the year to 31 May 2021. 249 were registered or beehives removed after the Management Agency contacted the beekeeper concerned and 9 apiaries were destroyed.

Registered or Removed

Unregistered

Unregistered Apiaries Destroyed

Apiaries

Identified

Annual Disease Returns

ADRs were submitted by 7,603 beekeepers (74%) by 1 June 2021, well up from the 5,200 received by the same time the previous year (52% of beekeepers). The dramatic improvement in return rate is believed to be the result of both recovery from the delays associated with the COVID-19 lockdown in 2020, and the use of HiveHub which makes it easier for beekeepers to submit their ADR. For comparative purposes, 64% of beekeepers had submitted their ADR by 1 June 2018 and 1 June 2019.

90% of beekeepers submitted their ADR online using HiveHub.

As of 1 August 2021, 694 beekeepers (7%) were still in default of their 2020 Annual Disease Return obligations. This represents a large improvement on 14% the previous year. 39 of these beekeepers had entered DECAs with the Management Agency. The Management Agency cancelled these agreements and the offending beekeepers were required to complete a COI.

Certificates of Inspection

64% of beekeepers (2,984 out of 4,663) completed their COI by 15 December 2020, compared to 70% in 2019.

722 beekeepers were in default of both their 2020 COI and their 2020 Annual Disease Return obligations. These beekeepers were issued with default notices under section 128 of the Biosecurity Act 1993 and the Management Agency scheduled default inspections of their apiaries. The costs of these inspections were invoiced to the offending beekeepers.

Notification of AFB Apiaries

In the 12 months to 31 May 2021, 2,206 cases of AFB were identified by The Management Agency from hives owned by 642 beekeepers. These cases were either notified by beekeepers or AP2 inspections. A further 320 cases of AFB were detected as a result of AP2 inspections of hives owned by 22 high-risk beekeeping operations.

This AFB notification data highlights that 6.4% of beekeepers notified cases of AFB to The Management Agency. These beekeepers notified an average of 3.4 cases per beekeeper. In contrast, AP2 inspections found an average of 14.5 cases of AFB per high-risk beekeeping

14.5 cases of AFB per high-risk beekeeping operation in 2020/21 represents a substantial decrease from the 52 AFB cases per high-risk beekeeping operation found in 2019/20. This is the result of two factors:

- 1. Newly detected high-risk beekeeping operations in 2020/21 are smaller than previous years, owning an average of 49 colonies (ranging from 5-185 colonies).
- 2. The Management Agency actions on default for high-risk beekeeping operations detected prior to 2020/21 are effectively reducing the level of AFB.

The smaller size of high-risk beekeeping operations detected in 2020/21 suggests that The Management Agency may have already identified most of the large commercial beekeeping operations with high levels of unreported AFB (greater than 10%) and that further high-risk semicommercial and small commercial beekeepers have yet to be identified.

AFB notifications by compliant beekeepers are critical to assisting The Management Agency in identifying beekeeping operations with high levels of unnotified AFB. All AFB notifications are routinely assessed to identify neighbouring apiaries that may be the source of disease. The Management Agency prioritises apiary inspections in locations where clusters of AFB notifications suggest that unmanaged AFB may be present in one or more apiaries.



National American Foulbrood Pest Management Plan Elimination Framework

Figure 3

Honey bees or materials suspected of AFB are not transferred or moved without permission Eliminate AFB in beehives by destroying any AFB cases & associated bee products, & by destroying or sterilising associated appliances associated with AFB are not used and not accessible to honey bees Reduce the reported incidence of AFB by an average of 5% each year Destroy honey bees & materials associated with AFB Notification of AFB Identify AFB cases in beehives Inspect hives for AFB Changes in hive numbers including sales & purchases Locate all places where beehives are situated & ensure that each honey bee colony is inspected at least once each year for AFB Annual Disease Return Notification of places as apiaries Establish / disestablish apiaries & Statements **Notifications** Beekeeper **Objective Objective** Beekeeper Actions

7. Management Agency

Board and Staff

2021 Board Members

- · Chair: Russell Marsh
- Deputy Chair: Val Graham
- Gabriel Torres
- Jason Ward
- Mark Dingle
- Murray Lewis
- Dennis Crowley
- Advisor to Board: Hayley Pragert
- MPI Observer: John Walsh



Management Agency Staff

- · Clifton King
- Marco Gonzalez
- Dwayne Hill
- Janette Gwilliam
- Tracey Gonzalez
- Leonie Elliot-Mason
- Jan MacKay



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