Why have an AFB NPMP?

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American foulbrood (AFB) disease of honey bees can be found in almost every country and is considered to be the worst disease of bees.

Once the disease reaches a certain level it will always kill the colony. Any colony then introduced to the used equipment will also die. Unchecked incidences of the disease can reach 100%. In the 1900s, AFB nearly destroyed the infant beekeeping industry in New Zealand.

Because of the severity of the disease, every country uses one of two strategies for control.

1. Antibiotics

Most countries (e.g., the USA and Canada) feed antibiotics to control AFB. This usually consists of feeding all colonies once or twice a year to prevent the disease, or just treating infected colonies. In the short term, feeding antibiotics to honey bees is a cost-effective solution which allows management of the disease in a way that is compatible with normal beekeeping activities. However, in the long term there are problems associated with the use of antibiotics, such as residues in bee products and treatment failure due to AFB developing resistance. Canada, the USA and Argentina are currently struggling with the resistance problem at the moment.

2. Search-and-destroy

Some other countries (e.g., Australia and England) have had a search-and-destroy strategy to manage AFB. This usually consists of some sort of government programme where officials inspect colonies and beekeepers have to destroy any hives with AFB. The use of antibiotics is usually forbidden. This system has the advantage that it is sustainable and there are no resistance or residue problems. However, this strategy can be more expensive than the use of antibiotics due to the need for inspections and destruction of diseased colonies. In addition, the bigger, and often unrecognised costs associated with this strategy are those resulting from hive management restrictions needed to prevent the spread of AFB between hives.

New Zealand beekeepers have traditionally chosen the search-and-destroy approach to AFB control. Whereas most beekeepers will successfully control AFB without the need for legislation, some will not, and their hives will be a source of infection for their neighbouring beekeepers' hives. Without legislation there is nothing to stop beekeepers exposing AFB-infected equipment to robbing bees, keeping hives with AFB, extracting honey from infected hives, etc.

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Historically, the legislation needed to control AFB in New Zealand was in the 1967 Apiaries Act and the AFB control programme was paid for by government. However, about 20 years ago the government told the beekeeping industry that it was no longer going to pay for AFB control and that the legislation controlling AFB was going to be removed. The industry was then given two choices:

- to have no legislative control over AFB. The end result of this approach would have been New Zealand beekeepers having to resort to feeding antibiotics to control AFB.
- for New Zealand beekeepers to write their own legislation to control AFB. This legislation had to be written in the form of a pest management strategy (PMS) under the Biosecurity Act 1993.

As most New Zealand beekeepers do not wish to feed antibiotics to control AFB, the only option was to write a PMS [Editor's note: now referred to as a pest management plan, or PMPJ. However it quickly became apparent that the legislation controlling pest management strategies (the Biosecurity Act) was complex and clearly not designed to make it easy for an industry as small as the beekeeping industry to write one. To make matters more complicated, the Biosecurity Act was new and nobody had written a PMS before. So not only was it a steep learning curve for beekeepers, but also for the then-Ministry of Agriculture and Fisheries (now the Ministry for Primary Industries) that controlled the legislation.

The first requirement of the AFB strategy was to have a goal. A committee of beekeepers was formed who asked the industry for submissions. From these it was decided that the primary goal was to eradicate AFB from New Zealand.

The next step was to write how this would be achieved and explain why the approach taken was the best. After a year, seven drafts, 100 pages and 55,000 words, weeks of committee meetings and public meetings all over New Zealand, it was completed. The beekeeping industry had done which many thought was impossible for them—they had written a PMS.

The Biosecurity (National American Foulbrood Pest Management Strategy) is almost identical to the previous Apiaries Act. There were only two major changes:

 before the PMS, each year every registered beekeeper was sent a statement of inspection form under the Apiaries Act. This required beekeepers to provide a signed statement confirming that they had checked their hives for AFB. Unfortunately, many forms were signed without the inspections being carried out, and many people signing forms were not competent at inspecting hives for AFB. The PMS changed this by requiring the inspections (certificate of inspections) to be carried out by people (approved beekeepers) who could prove they could recognise AFB. By being 'approved', beekeepers could also avoid having to provide a certificate of inspection for their own hives.

 the PMS recognised that no outside agency could eradicate AFB. All it could do was help beekeepers to eradicate it by providing a free AFB testing service, counselling and an education programme.

So in conclusion, beekeepers probably had few other options but to have a NPMP for AFB. AFB control has now been shifted from being a government responsibility to being a beekeeper responsibility. This is probably a good thing, although I am sure few beekeepers enjoy having to pay for the NPMP. It is now left to beekeepers to make sure that the NPMP works and eradication is achieved.

[Editor's note: This is the twelfth and last article of a series that has been written for the Management Agency for the American Foulbrood National Pest Management Strategy, now referred to as the American Foulbrood National Pest Management Plan. These articles were first published beginning in 2003, and have been reviewed and updated where necessary. The original title was 'Why have a pest management strategy for American foulbrood disease'.

The articles cover a range of aspects of American foulbrood control, including how to inspect for and identify diseased colonies, the management of colonies to prevent American foulbrood and a beekeeper's legal obligation with regard to American foulbrood.]

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HOBBYISTS' CORNER

News from Wanganui Beekeepers' Club

By Anne Hulme

We might be a small club in Wanganui, but we are very active.

One of our aims is to encourage new beekeepers' to enjoy the hobby, and to help them get their own honey in their first year.

This season we have trained a big group of novice beekeepers, all keen to learn the



Margaret is keeping tabs on Frank Lindsay while he judges the novice classes.

skills on the club's beehives, with the result that we have extracted almost double the



Leroy had canvassed the beekeeping fraternity to get some very good prizes.

amount of honey taken off our 10 hives the previous year.

A large number of budding beekeepers attended the monthly evening sessions, right throughout the year, which has whetted their appetites for the practical classes at the club's apiary in the weekends. All the novices now have one or two hives each on their own properties. Those who are able to work confidently on their own are swotting up the yellow AFB book, preparing to sit for their DECA certificate next month. Recently we held our honey competition and had to have a last-minute change of venue to the local school hall, owing to the large number of members attending. Maybe it was because they had heard that Frank Lindsay was going to be the judge.

Frank was a fount of knowledge, and everyone was happy to learn from the remarks he made about their honey.



Linda, who regularly travels all the way from Marton, chooses her booty. She was the winner of the points prize in the novice classes. Photos: Graham Pearson.

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