



ApiWellbeing

Enhanced diagnostic capability and centralised bee biosecurity

About the project?

The *ApiWellbeing* project is replacing the Bee Pathogen Programme.

The *ApiWellbeing* project is a project funded by the Ministry for Primary Industries Operational Research, supported by the Management Agency of the National American Foulbrood Pest Management Plan (AFB PMP).

It involves activities to increase our efforts in understanding the health of New Zealand honey bees (both exotic and endemic diseases and pests).

What are we doing?

As part of this project, we are:

1. Developing new molecular tests for endemic and exotic organisms including sacbrood virus, cloudy wing virus, slow bee paralysis virus, varroa destructor virus, Moku virus, Israeli acute paralysis virus, acute bee paralysis virus and chalkbrood fungus (*Ascosphaera apis*). This will further enhance the diagnostic capability of Biosecurity New Zealand and provide clarity on the freedom-from disease status and the endemic pathogen burden of New Zealand bees.
2. Sequencing the genomes of *Paenibacillus larvae* (American foulbrood) to allow New Zealand to better understand the genetic diversity and disease-types of the bacteria and how clusters of disease may be linked.
3. Creating an array of resources and guidelines for beekeepers to enhance bee biosecurity in New Zealand, present them in an accessible and translational platform for use by the industry.
4. Establishing a national collection of bees and data for a:
 - verification resource to substantiate scientific outputs arising from the Bee Pathogen Programme, or for comparison with other similar cohort studies;
 - demonstration of the “presence or absence” of new or emerging bee pathogens that could inform early decisions during a biosecurity incursion investigation or response, and reduce costs; and
 - enabling additional bee health and other research opportunities, for example future studies on honey bee genetics or chemical residue analysis, which would reinforce the scientific value of the bee collection.

Who are we?

The study involves Biosecurity New Zealand staff, the American Foulbrood Pest Management Agency, authorised apiary inspectors, and apiary owners who have agreed to be part of the research.

Biosecurity New Zealand and the Management Agency of the AFB PMP are working together for a significant part of this project to better understand American foulbrood or *Paenibacillus larvae* in New Zealand.

Biosecurity New Zealand is the government agency charged with protecting New Zealand from pests and diseases at the border or before they arrive in New Zealand, and eradicating or managing the impact of those already here.

The Management Agency of the AFB PMP is the agency responsible for monitoring beekeeper compliance in eliminating American foulbrood in managed honey bee colonies throughout New Zealand.

Where can I keep up to date on the project?

All research will be published on this [webpage](#), in an open access journal, and also, www.AFB.org.nz.

Who to contact?

If you have any further questions, please do not hesitate to contact us:

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www.biosecurity.govt.nz/honey-and-bees/

Ko Tātou This is Us

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