TBfree

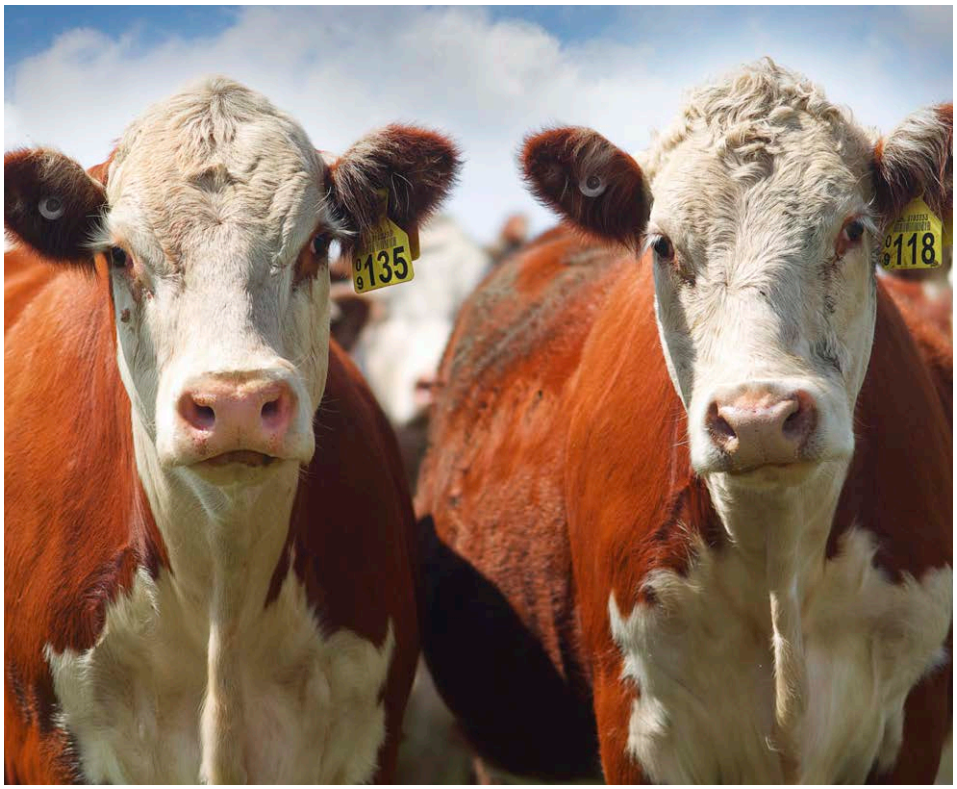
PROOF OF FREEDOM FROM BOVINE TB

WORKING TOWARDS TB ERADICATION

The TB National Pest Management Plan (NPMP), commonly known as the TB plan, aims to achieve TB eradication in New Zealand. The objectives of the TB plan are:

- TB freedom in livestock by 2026
- TB freedom in possums by 2040
- Biological eradication of TB in New Zealand by 2055.

This factsheet will demonstrate how OSPRI New Zealand Limited will measure the progression towards and ultimately the success of achieving these three milestones.



HOW DO WE MEASURE TB FREEDOM?

TB FREEDOM IN LIVESTOCK

This will be measured by the number of infected status herds determined through livestock TB testing regimes and slaughter surveillance.

TB FREEDOM IN POSSUMS

This will be measured by the hectares of vector risk area that have been revoked (achieved using the Proof of Freedom (POF) process)

OUR GOALS

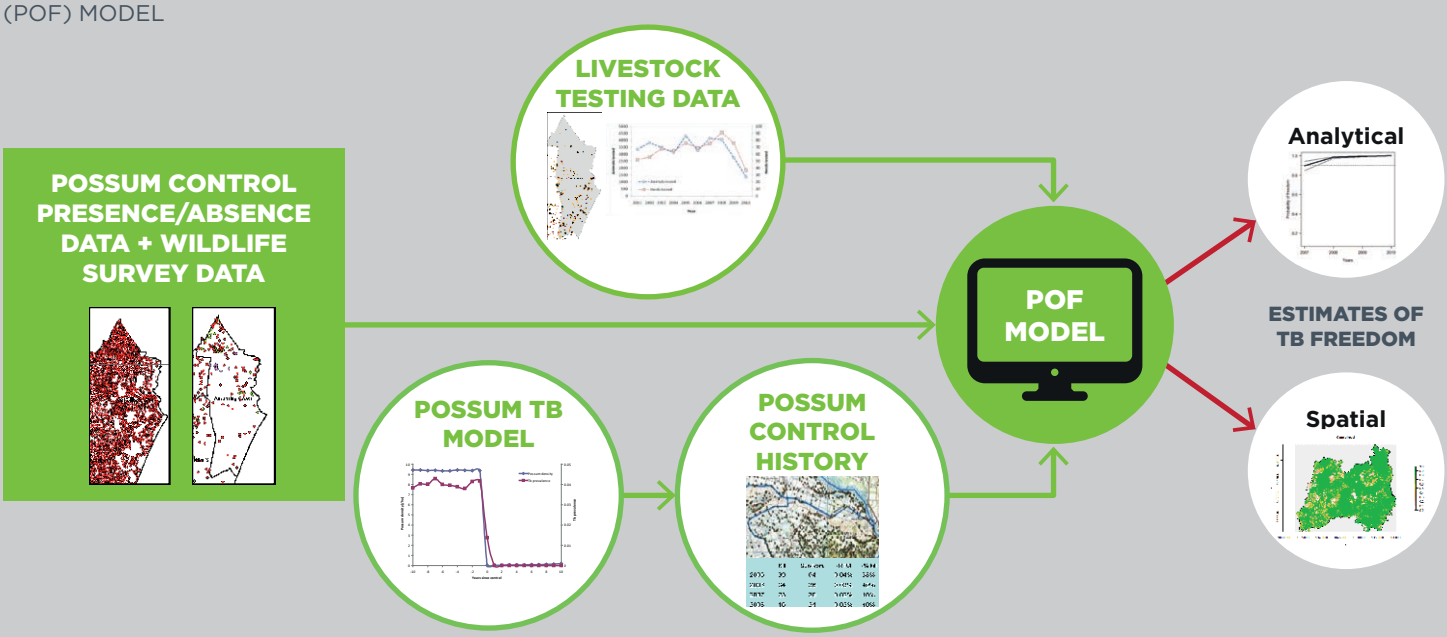
2026
TB freedom in cattle and deer herds

2040
TB freedom in possums

2055
Biological eradication

PROOF-OF-FREEDOM FRAMEWORK

(POF) MODEL



PROOF OF FREEDOM

The Proof of Freedom (POF) model provides a high degree of confidence that TB has been eradicated in possum populations within a defined geographic area. The output of the POF model guides decisions on the need for further vector control or surveillance activities and supports the decision to cease active management at the appropriate time.

In essence, the POF model estimates the probability that previous possum control has been sufficient to eradicate TB from a defined area.

HOW DOES IT WORK?

The POF modelling process uses a combination of the following information:

- Possum control history
- Possum population density measures
- Surveys for presence/absence of TB in possums by sampling possums directly or other available wildlife such as pigs, deer and ferrets
- Results from TB tests of any cattle or deer herds in the vicinity.

This information is analysed using epidemiological and ecological models developed to provide a statistical estimate of the probability that TB has been eradicated in possum populations. This analysis includes a continual assessment of the coverage of possum habitat to ensure that there are no gaps in surveillance information.

Once a threshold of confidence is reached, additional wildlife surveillance and/or control activities are initiated to provide empirical evidence to support that TB is indeed absent. This 'threshold' is based on expert opinion and uses information of disease trends in wildlife and local livestock as well as control activities completed to date.

WHEN CAN AN AREA BE DECLARED TB-FREE?

Once the POF model determines an area has achieved a 95% or higher probability of TB eradication in possum populations, cases are submitted to an expert scientific panel (which includes two members independent of OSPRI) before a declaration of TB freedom can be made.

When the panel is satisfied that the entire possum population within the area of interest has been adequately suppressed to break the TB disease cycle and that the reinvasion risk has been addressed, the panel will make a recommendation to the OSPRI Board for the revocation of the vector risk status. If this recommendation is approved by the Board, the area will be re-classified as a Vector Free Area (VFA) and declared TB free.

ON-GOING MONITORING OF VECTOR FREE AREAS

The high level of confidence attained through the Proof of Freedom process reduces the risk of future wildlife related infection in livestock but there is continued monitoring of livestock and passive surveillance of wildlife species to provide assurance that the correct decision has been made. In the unlikely event of a recurrence of wildlife related TB infection there is a mitigation plan for each revoked area.

FURTHER INFORMATION

Contact OSPRI on:

0800 482 463

or visit:

ospri.co.nz