Managing bovine TB in New Zealand

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Co-operation between the farming sector and central government is the cornerstone of New Zealand's world-leading bovine tuberculosis (TB) control programme.

When the number of TB-infected herds was on the rise in the 1980s, government and farmers collaborated to form the Animal Health Board (AHB) - now one of the country's most successful private-public partnerships.

This success is due to farmer involvement in the TBfree New Zealand programme and the fact that they contribute a substantial amount of funding to control the disease. Another contributing factor is that the AHB was set up for a single purpose - to control bovine TB.

Together, central government and the farming sector developed the national TB control strategy, which set the benchmark for managing the disease throughout the world. Since its implementation, the number of infected herds has fallen to fewer than 100.

However, the disease wasn't always effectively managed in New Zealand. It became a major financial threat to the country's farmers in the 1970s and '80s. At the time, a TB control programme was put in place, but the disease continued to infect cattle and deer herds with no obvious explanation.

The missing link was the introduced Australian brush-tail possum, which maintains TB in its population and spreads the disease to farmed cattle and deer. Infected possums were found to inhabit around 38% (10m hectares) of New Zealand and analysis indicated they were responsible for up to 70% of new cattle and deer herd TB outbreaks in these areas.

This was evident in the mid-1980s to early '90s, when bovine TB posed a major risk to the value of New Zealand's high-quality beef, dairy and deer products. During this time, the number of infected herds reached more than 1,700.

The situation began to change with the development of the national TB control strategy and the AHB's network of 15 regional TBfree committees. The committees are made up primarily of farmer volunteers and local stakeholders, who communicate, advocate and support the delivery of the strategy in each region.

Historically, the strategy aimed to curb and slightly reduce the number of infected herds, but a lack of resources for controlling TB in wildlife meant the disease continued to spread in the possum population.

The strategy was revised to include more wildlife control and the approach proved a huge success. While a small number of New Zealanders oppose using toxins to control introduced pests, the reality is that these imported predators not only spread TB, they also destroyed native plants and birds.

The recently updated TB strategy will employ aerial possum control and extensive ground-based work using toxins to eradicate TB from possums across 2.5m hectares, or 25% of the area identified as containing infected wildlife.