

Tb farming gets support

Research ready to roll

by Noreen Hegarty

INVERMAY'S DEER disease group plans to start farming Tb infected animals near Milton, Otago, in March.

Group leader Dr Colin Mackintosh says the group has fulfilled the first criteria needed to achieve full scheme approval from MAFQual — more than 70 per cent of neighbours within a 5 km radius of the Table Hill farm have signed a letter of agreement to the scheme.

He says the test and slaughter programme to control bovine Tb in deer had made disease research virtually impossible.

"Sometimes, animals that react to the Tb test are protected from the disease.

"Those animals may be important as they may have an immunity to Tb so they could be used for Tb-immune breeding."

Special consent for the programme had to be sought from the director-general of agriculture, the chief veterinary officer and the Animal Health Board.

The Table Hill farm, owned by Colin Batchelor, has 50 Red breeding hinds and replacement stock on it, but the Invermay group intends to have more land fenced so the unit carries 100 deer.

Mackintosh says the programme, to be run over the next six to eight years with the option of renewal after that, intends to look at the risk factors associated with deer-to-deer Tb transmission; factors relating to resistance and susceptibility to Tb among animals equally exposed to the disease; vaccine tests and Tb resistance breeding.



Invermay's Colin Mackintosh and Rob Labes

Vaccines could be tested in four years

"We have to have clean and infected areas to be able to study deer-to-deer transmission, so we will run small groups of infected animals on the farm.

"We hope to be able to start testing vaccines on the property in three to four years to see if it is possible to immunise deer.

"The best way to do that is to put vaccinated animals into an infected environment along with unvaccinated animals."

MAFQual set down strict safeguards to ensure neighbouring farms aren't infected with Tb from the Table Hill farm.

More than 70 per cent of neighbouring farmers had to agree to the programme; possums from the trial farm and from within a 1 km radius

around it must be controlled; ferrets, feral cats, pigs and deer within a 3 km radius around the farm must also be eliminated.

The farm's perimeter deer fence will be possum-proofed with netting and electric fences.

Mackintosh says the group is formulating its programme of possum control for submission to MAFQual and once that and other programmes have been approved, the group will go on to the property.

Programme staff will initially comprise two veterinarians and two technicians from MAF Invermay but the group will be working closely with Dr Frank Griffin and the Deer Research Unit at Otago University.

"It's a joint venture,"

Mackintosh says.

"We will be relying on Otago University laboratory services and the scheme will provide Dr Griffin's team of immunology scientists with access to trials essential to the development of a Tb vaccine.

"The group will also be co-operating closely with Mike Tate of Invermay's genetic markers laboratory who will type all trial deer so genetic markers in Tb resistant animals can be identified."

Mackintosh says once Tb was better understood, more precise farm management decisions could be made to control it. At this stage control was largely based on guesswork and little was based on research.

It is thought less than half a per cent of New Zealand deer are infected with Tb, but Mackintosh says in a national herd of one million deer that meant up to 5000 could be infected.

"However, a lot of deer killed as Tb reactors don't actually have Tb lesions.

"If, as expected, a Tb vaccine is developed, the trial farm at Table Hill will be critical for its testing programme."

MAFQual's Paul Livingstone says in 1990, 2,941 deer were Tb reactors and were slaughtered. To October 1991, 1,054 were slaughtered.

"This year [1991] on average, 27 per cent of the 1,054 deer have shown lesions," he says.

"In 1990, 600,000 deer were tested, 1 per cent of those were reactors and 30 per cent of that 1 per cent showed lesions." □