

## Peel Forest Estate on the pathway to Johne's disease Resilient Deer

When Peel Forest Estate realised we had a problem with Johne's disease (Jd) in 2000, we decided that we were no longer in a position to sell live deer and therefore the stud had to withdraw from it's core business of selling breeding stags and hinds.

Having invested heavily over the years in top red deer genetics from all over the world we felt that we had much to offer the industry and that our genetics were too important to the industry not to be available. We decided not to be beaten by Jd but instead to make a serious commitment to diagnostics to turn our challenge into an advantage for the industry.

Over the last eight years Peel Forest Estate with the help of the diagnostic tools made available to us through Prof Frank Griffin and his team at the Department of Microbiology & Immunology at Otago University has not only enabled us to dramatically improve the status of our herd but more importantly set us on the pathway to producing Jd resilient deer.

Having had Jd on the property and being well aware of the difficulty of eradicating the bacteria, it has given ourselves and Frank Griffin's team an ideal environment to analyse the ability of various breeds and bloodlines within those breeds to handle the challenge. After extensive and continual diagnostic testing and intensive analyses of pedigrees and bloodlines that have been made available to the university from our stud data base, we are now moving towards identifying those breeds, bloodlines and animals within them that are either resilient to the disease or susceptible.

This is a huge breakthrough for the industry, Peel Forest Estate and the team at Otago University as the awareness of the prevalence of the disease and its detrimental effect on productivity in the national herd is now being fully recognised.

For farmers being proactive in combating Jd and investing in a programme, it is important that they introduce genetics into their herd using resilient bloodlines. This will ensure that the investment they have made in those bloodlines and the progeny they produce are more resilient while production and survivability are maximized. In the case of replacements it is desirable to build up a resilient herd.

As Peel Forest Estate continues down the pathway to produce resilient deer and with the knowledge that we are gaining regarding breed and bloodline influence, our breeding focus is changing. We will still retain our strategy of producing genetics that will assist the industry to improve productivity, however, we will focus on resilience as being equally important. DBV's are important but the fitness of animals used either for finishing or as replacements is equally important in order to sustain high performance animals that farmers need. For straight terminal growth rates our new terminal sire bloodline called B11 is proving to be extremely resilient and producing impressive weight gaining weaners.

Peel Forest Estate has a policy of only selling 3 year old stags that have been repeatedly tested for Jd giving our clients more confidence for freedom from disease with a stag that can cover considerably more hinds than a younger one. The potential of our journey down the resilience pathway is very exciting for us and the industry.