


## VETS IN RESEARCH AND EXTENSION

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No professional group has as much contact with deer farmers on their home territory as veterinarians. Obvious things that come to mind are Tb testing, calving difficulties, animal injuries, disease problems and even velvet antler harvesting. We should ask the question "Is the opportunity for extension and the use of some R & D results being used as well as it could be?" The answer depends on who answers the question.

The farmer says: "Vets should stick to their knitting and carry out,"procedures" for which they get paid - and even that costs us too much!"

and/or: "Most vets do not understand my wider whole farm management issues so I do not value their extension."

and/or: "Information costs and it will cost more from vets than elsewhere."

The research worker says: "But vets will get my research findings "screwed up" and I will lose control."

The farm consultant says: "I want vets to keep out of my patch because I see the holistic approach to deer farm production performance."

The veterinarian says: "I see a great many deer farms and farmers and have a much wider appreciation of technical issues than most people think. I can be cost effective with technical advise."

The farmer thinks that the vet thinks: "Here is an easy way to add to the bottom line of my practice."

Before I come back to the question about extension I want to briefly review where I see the veterinary profession currently involved in research, development and extension.

### 1. Direct research

Deer research veterinarians at AgResearch, Invermay make an enormous contribution to a large programme. Not only do they conduct excellent front line research into problems such as Tb, Yersiniosis, parasites and stress-related animal health they also contribute heavily as part of a team investigating reproductive physiology, antler velvet research and growth physiology. The partnership with people trained in a variety of disciplines adds great value to successful research. The uptake of useful new information by deer farmers from veterinary research can be direct or it can be indirect through veterinary practitioners who can learn and debate issues at events such as their excellent annual conference.

The problem of Tb in our deer herds is still with us and it remains probably the greatest risk factor to our continuing and expanding trade in the western world. Research such as that conducted at the infected deer farm near Invermay is enormously important to our better understanding of the disease and how it is transmitted. The project and the progress would never have been possible without full collaboration between research veterinarians and the immunology work from Frank Griffin's laboratory. Possums as Tb vectors need more study in their own environment and the work needs a team approach where all participants recognise the contribution others make. The wildlife veterinarian is a vital link in this work and in the study of other wildlife vectors such as ferrets, pigs and cats. We neglect the better understanding of the small carnivores to the Tb problem at our peril. Zoology and veterinary science are the essential skills required.

## 2. Velvet antler removal

This emotive topic has produced a feeding frenzy that the deer industry and the veterinary profession did not need. The farmer accreditation scheme, however is up and running. There is not the slightest doubt that a scheme was needed to demonstrate to the world that New Zealand is serious about its responsibilities to animal welfare and we are vulnerable to non tariff trade barriers. It is to be hoped that we can put previous difficulties behind us, make sensible modifications where they are required and show that the harvesting process can be done without detriment to the animal. I would like to pay tribute to the Deer Branch in its handling of the issue. Although there was a wide diversity of opinion about velvet removal among veterinarians a consensus position was reached only after widespread debate and communication. The National velvet Standards Board with its veterinary/farmer mix is a very important group as it follows up the work already done.

## 3. The Veterinary School

An obvious major function of the school is the teaching of veterinary students. Not so obvious is the extent and quality of the course content in relation to farmed deer. The academic, clinical and practical deer work at Massey is outstanding in giving deer practice options to new graduates. It is a tribute to the staff of the Massey Veterinary School that they have supported deer farmers so well from the very early days of deer farming. Post graduate deer projects are important, partly to increase relevant deer knowledge and partly to stimulate interest in deer industry R & D for new veterinarians. Deer are not just large sheep or small cattle and specialised knowledge by veterinarians will improve the effectiveness of extension work.

## 4. Case reports

The sharp end of deer health problems will always be seen by the veterinary profession and it is important that information is shared and lessons learned. Documentation of disorders, the treatment and the results needs to continue to be shared through newsletters and discussed at workshops. Effective deer health extension work will grow if deer farmers have confidence in the profession as it deals competently with disease and health concerns. Many well documented case studies will be direct catalysts for investigative research projects.

## 5. The veterinary profession and quality management

Veterinarians have major roles in the monitoring and surveillance of disease in the national deer herd through MAF Quality Management. They also have an essential role in disease detection in our DSPs. Rather than a "policeman role" these vets must strive to be seen as "part of the solution" rather than "part of the problem" by the deer industry. Good working relationships will establish opportunities for research in areas such as animal transport and handling at the DSP.

The management of deer farms shown to be infected with Tb is often difficult for the image of the "regulatory" veterinarian but it is the challenge to which the profession must rise. Top quality extension work is necessary to convince farmers that a certain course of action is not only legally necessary but essential to reducing the seriousness of the disease for all producers. Carefully planned extension programmes, where there is an ability to listen to the valid concerns of deer farmers, are necessary. It may even be that, from time to time, the bureaucratic process can be shifted to accommodate farmer views without putting the process at risk!

## 6. International linkages

The veterinary profession by its very nature is international in such things as animal or embryo importation into New Zealand and in disease control. Because the farmed deer industry in New Zealand is more advanced than in most parts of the world it is feasible for us to develop valuable international associations with advanced research laboratories and gain new technologies for New Zealand. An example where we have not so far been very successful is the better understanding of Malignant Catarrhal Fever. This nasty virus is believed to be carried by sheep, which do not show any disease symptoms, but we can only watch at a distance as a few overseas laboratories improve our knowledge base. The area of parasitology research is an important international one and the New Zealand veterinarians should be quite proactive in seeking out improved control procedures which will suite pastoral deer farming. There will always be a fine line to be drawn between trading off our deer technology overseas for information of value to us.

## 7. The Deer branch of the NZVA

This annual conference is one of the most successful events to ever come out of the New Zealand deer industry and is a tribute to the veterinary profession. The proceedings are required reading for the entire deer industry. Over the last eight years there have been about 230 papers published in the proceedings with about 60% from the veterinary profession. This is quite a spectacular effort but the thing I find so encouraging is the 40% from non-veterinarians. Interchange of information between vets and industry people is the lifeblood of extension and is most effective in a workshop environment. I would like to see more of the significant deer course workshops finding their way into the deer media and farming field days. Deer industry reporters go part of the way but sometimes fail to get to the heart of technical issues. Last year this conference covered the topic of welfare in the deer industry. Next to Tb the topic is of extreme importance to the New Zealand deer industry and yet many deer farmers do not recognise this. There is a great deal of education and extension needed. For this to be successful with the majority of deer farmers it must be handled carefully to avoid any perception that it is self serving to the veterinary profession. It will be wise to come at this topic on a regular basis and from a number of directions in order to make a fundamental change in the way many farmers perceive their deer farming and handling practices.

## 8. Deer extension work

There are clear opportunities for veterinarians to provide technical information to individual deer farmers because of their farmer contact. Source of information is a question. There is the thorny question of intellectual property.

In days gone by when MAF operated through a number of divisions by direct Government funding life was fairly simple. Why would any farmer buy information when it was freely available through MAF or DSIR? Not so in 1994. The Crown Research Institutes (CRI) are research companies which only survive through their ability to win research contracts from the Government (FRST) or the private sector. Research information derived from FRST contracts is owned by the CRI which is bound to consider the commercial opportunities if it wants to develop an effective future. Research funded by the private sector provides information owned by the private sector.

One of the best ways through this situation is for the vet to become part of a team which moves technology out onto the deer farm through demonstration and field days. This can be done through extension contracts funded by a range of options - but it requires vets with an interest and commitment to appropriate extension and with a few notable exceptions I do not see much of that in the veterinarian's culture. Times will need to change. Vets will need to think more about the application of new information - where it will work and where it won't than just responding to a call from a farmer to patch up a hind that got a back leg tangled up with some loose fencing wire. The culture in the practice may need to change to improve deer farm productivity through technology rather than concentrate mainly on decreasing wastage.

## Conclusions

To come back to my original question "Is the opportunity for extension and the use of some R & D results being used as well as it might be?", the simple answer is no; there is much room for improvement. Innovation is needed to transfer new or improved information to a producer who really believes it will make more money than it costs or will cut costs for the same output. Demonstration farms, where farmers can see the "before and after" effects of new ideas, is still one of the most successful techniques of extension. The veterinary profession must put as much effort into transferring new information to the deer industry as it puts into establishing the new information in the first place.