

DEER HEALTH AND PRODUCTION PROGRAMMES

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This paper looks at the changing role of Veterinarians in New Zealand Deer Farming, and outlines, as seen through a farmer's eyes, some ways in which Deer Practitioners can and should alter their practices to offer a competitive and effective service.

Introduction

The past two years have seen major changes in the New Zealand Deer Farming scene. The effects of the new Livestock Taxation system and a high-interest, high-inflation economy have combined to produce an industry confronted by uncertainties. Add to this the complex marketing problems following the Chernobyl nuclear accident and it is easy to see how many farmers have slipped from a position of economic strength to a new low of financial frailty.

To many, especially those with limited industry contact, Deer Farming still conjures up an image of high prices and high returns, the 'RANGE ROVER' of farming policies, but to those concerned, reality is a more sombre picture.

It is in this new environment that our services as Veterinarians will be tested and evaluated. Success will depend on our ability to adapt rapidly to Deer Farmers' changing needs.

The Changing Market

In order to understand future possible changes to Veterinary income it is necessary first to examine present farmer spending in the area of Animal Health.

TABLE 1.

## ALTERNATIVE ENTERPRISE ANIMAL HEALTH BUDGETS

FARMING SYSTEM	UNIT SIZE	ANIMAL HEALTH COSTS \$ PER S.U.
Intensive Dairy	100 + Cows	2.40 - 2.70
Deer - Velvet	100 + Stags	6.00 - 12.00
Deer - Breeding	100 + Hinds	2.30 - 2.90
Breeding Ewes	1000 +	1.40
Breeding Cows	100 +	30-40c
Milking Goats	70 +	\$4.00+

NOTE. [These are generalised costings only, and specific

problems such as large scale Facial Eczema control or Tick control programmes can cause major variations on individual properties or on a regional basis.]

The information presented in TABLE 1 indicates that present spending in the Deer Animal Health area is equal to, if not greater than most other farming enterprises; a fact that most of us already realise. This has meant a general increase in practice work load and turnover as farmers have diversified into Deer.

A more detailed breakdown of this spending however may point to a less rosey future.

#### 1) Velvetting Herds

The number of large scale velvetting herds in my area, and certainly most of the Waikato tend to be decreasing. As a rule most farmers are now only keeping enough adult stags to cover annual mating requirements.

High spring meat schedules have meant that wintered-over meat stags are normally slaughtered before velvet grows.

A very low percentage of farmers still continue to use black market drug supplies or others use "minimal chemical interference."

#### 2) Deer Breeding Units

### BASIC ANIMAL HEALTH COSTS

#### Farm Policy

100 Hinds    5 Stags    16 yearling Hinds

4 - 5%    Deaths    85% Fawning

Sell as yearlings

TABLE 2.

OPERATION		FREQUENCY PER YEAR	COST
Drenching	Adults	x 2	88.00
	Weaners	x 5	130.00
Clostridial Vax.	Adults	x 1	16.00
	Weaners	x 2	26.00
Tuberculosis	- Herd		350.00
Testing	- Sale		75.00
Velvetting	- Main	5 Stags	180.00
	- Regrowth		80.00
Fawning	5%	5 Hinds	200.00
Miscellaneous:			
Lameness, Yersinia, M.C.F. Lepto Vax+, Trauma		4 Visits	275.00
Total			\$1420.00/year

or                      \$2.85/S.U.

Tuberculosis testing currently features as the major cost on most Deer Animal Health Budgets. In the example presented above it accounts for almost 30% of the annual spending. As the Accreditation scheme progresses less frequent testing will become the norm. This will mean a substantial lowering of Veterinary income and perhaps more importantly the loss of essential farm contact.

If animal prices continue to fall and profit margins narrow then further pruning of the An. Health budget is likely to occur, initially within the following areas:

- a) Adult drenching - of unproven value in many cases
- b) Clostridial Vaccination - low incidence  
- many don't vax. already
- c) Fawning - costed at 5% level in TABLE 2. Better management controlled feeding have reduced dystocia rates to 2 - 3%. Farmers are generally learning to cope with most problems independently. This is especially true for those farms equipped with crushes.
- d) Injury and Trauma - this is rapidly becoming less common

as deer become more domesticated and handling facilities improve.

Therefore in an accredited herd, with good management and limited risk-taking there could be scope to reduce future An. Health spending by up to 50%!

This is one of the major benefits farmers see in diversifying into deer. Once a deer farming venture is established (i.e. fences - stock) it is a low input operation which in effect gives it a degree of inflation resistance.

Another area which Veterinarians should seriously examine is that of herd death rates. Early industry statistics routinely identify loss rates at the 4 - 5% level, but from my own observations, and discussions with other farmers, loss rates now appear to have fallen to approximately 2%. Within this 2% figure trauma still features, many are untreatable because of viral disease such as M.C.F. and most, when discovered by the farmer, are already dead.

These figures tend to highlight the fact that where deer farming is concerned, Veterinary emergency intervention has limited opportunity to change the direction of disease and thereby improve farm profitability.

The combined result of the before mentioned factors tends to predict a general decline in the need for traditional veterinary services in deer farming. The fact that most farmers are rapidly expanding their animal numbers tends to camouflage the reality that spending per S.U. is actually decreasing.

The rate of decline in utilisation of Veterinary services will be a reflection of existing industry prosperity.

#### Planned Animal Health and Production Programmes

Opportunities now exist in deer farming to design specific health and nutrition programmes where success can be measured by production parameters. It is only through pre-planned, carefully monitored programmes that Veterinarians can prove the cost-effectiveness of their services. These programmes may be widely varied in both the depth of farm involvement and the specificity of problems investigated but they should carry the common thread of improved productivity - increased profitability.

To understand the significant increases in farm income that can eventuate from a successfully applied programme let us examine a simplified example:

Farm details:

100 Hinds	75% Fawning	[ <u>Not</u> uncommon]
Policy - sell weaners		
Av. sale weights - weaner hinds	43kg	
Av. sale weights - weaner stags	47kg	

On-farm investigation may have revealed a range of contributing

factors including:

- excessive fawning losses (dystocia)
- high peri-natal mortality - external parasites, poor fawning management
- problems compounded by poor hind nutrition during lactation

If by reducing the An. Health problems and improving nutrition [using professional advice from outside farm consultants as required] we can produce the following results:

Fawning 85%    Weaner Hinds Av. 48kg    Stags Av. 50kg

TABLE 3.

COMPARATIVE GROSS INCOME

BEFORE	AFTER
38 Weaner Hinds Av. 43kg @ \$19/kg    \$31,046	43 Weaner Hinds Av. 48kg @ \$19/kg    \$39,216
37 Weaner Stags Av. 47kg @ \$4/kg    \$6,956	42 Weaner Stags Av. 50kg @ \$4/kg    \$8,400
Total Income <u>\$38,002</u>	Total Income <u>\$47,616</u>

Results - 25% increase in performance

- \$9614 increase in gross profits

Although this example is very simplistic it is not difficult to see the economic merits of such a programme. As farms become larger and hind numbers increase, relatively small percentage improvements in fawning and growth rates, or reduced losses, will result in significant financial rewards. The trend to corporate farming and a generally more business-like approach by most farmers will mean that cost-benefit analysis of veterinary services will become the norm.

The successful implementation of such planned Animal Health and Production programmes will, as in other areas of veterinary endeavour, require the integration of a range of existing and new skills. No longer will the ability to diagnose and treat disease be sufficient. We must attempt to understand the complex relationships between management, nutrition and disease at the individual farm level in order to achieve the required

productivity increases.

Consider for instance the commonly encountered Yersiniosis outbreak. How often do we decide that nutritional stress has been a significant contributing factor? Usually our parting suggestion to the farmer goes something like this, "Oh and a ½kg maize/weaner/day will help improve the present feed shortage."

While short term concentrate feeding may be the only solution, is it not better to look back for the initial cause of the present feed deficit. Is there overstocking? Are feeding priorities correct? Has Autumn management conserved sufficient winter feed? Until we understand what the important causal factor was that led to the present feed shortage, we will have little chance of helping clients avoid further outbreaks with resulting financial loss in future years. I understand this to be as important a role as dealing with the clinical cases presented. Whether we as Veterinarians can attempt to solve these problems ourselves or seek outside professional help will depend on the complexity of the situation encountered and our personal expertise in the areas concerned.

Further, as we gain increasing ability to control and manipulate the reproductive cycle in deer it will become possible to introduce wide ranging programmes to improve animal productivity and pasture utilisation. Add to this recent developments in the field of artificial breeding, embryo transfer and genetic manipulation and we now have one of the brightest areas for market penetration.

There can never be a generalised programme to suit all situations. Veterinarians must use their skills to deal with the particular problems encountered. They must develop an ability to effectively interact with other farm consultants and then, using their personal understanding of farmer abilities carefully communicate the relevant details to maximise returns on Animal Health spending.

### The Future

The Profession should regard with some trepidation the Government's stated aims that its next area of reform will be the exclusive rights of Professional institutions. Already Lawyers have felt the winds of change in the area of property conveyancing, Doctors are now seeing their nurses establishing distinct areas of health care. Dairy Practitioners will now only hold fading memories of mornings spent Tb testing and about the only thing we can regard with certainty is that further changes are coming.

It is now up to this Branch and its individual members to do an effective job of promoting and marketing our skills. We are fortunate in having many new developments in the research field opened up to us and using this information it is our responsibility to prepare the appropriate programmes to benefit our clients.

I feel that during the introductory phase of Planned Deer Health and Production programmes there may be opportunities to change the way we charge for our services. Any system which would spread risk sharing between both parties and make payment at least partly, performance related would receive greater farmer acceptance. This would reinforce to the farmer that increased performance is the goal and on the Veterinarian's side it would ensure that only suitable properties with adequate management are selected and that operator skills are satisfactory.

In general, Veterinarians are held in a position of considerable respect by their Deer Farming clientele. It is important that we continue to earn this respect by developing an in-depth knowledge of the farming operations we service. Not only should this include a genuine concern and care for the animals under our control but also an appreciation of the aims and goals of the people we deal with. Only through sincere interest and an eagerness to communicate our acquired knowledge can Veterinarians ensure a developing and expanding role in Deer Farmings' Future.