

# Update on deer industry issues

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## 1. Introduction

The deer industry has continued on its price and production roller-coaster. After record prices and export earnings, the market has turned around extremely rapidly with the venison schedule almost halved over the last 6 months and market prices approaching historic lows. Current conditions are the result of stocks left unsold because of unrealistic pricing last season and importer and distributor wariness about further potential losses if prices continue to ease. Climatic and economic factors mean producers have been able to afford to hold animals back in response to the falling schedule, which is positive for the short term situation. However, it remains to be seen how seriously relationships with supermarkets, distributors and chefs have been damaged.

As well as a trying time in the market, the deer industry is grappling with some major issues ranging from increasing consumer sensitivity about welfare issues, the Kyoto Protocol, Johne's Disease and a review of the Regulations surrounding the prohibition on the feeding of ruminant protein to ruminants.

## 2. Outline

This paper covers industry production and export statistics and updates the latest forecast numbers for future herd growth and production. Updates are also provided on:

- Climate Change Programme. An update on work underway in conjunction with other industry organisations in response to the government's recently published preferred policy package relating to ratification of the Kyoto Protocol.
- Welfare: An update on the development of an industry code of welfare for deer farming and related welfare issues.
- Johne's Disease. Development of an industry strategy to address Johne's Disease in deer within a broader potential pan-industry programme.
- Review of Biosecurity (Ruminant Protein) Regulations
- DEEResearch. An update on DEEResearch's research programme.
- VARNZ. An update on the VARNZ velvet research programme and the internal and independent reviews of the programme. The paper will also cover an update on the process of researching and assessing compression analgesia for velvet removal.

## 3. Venison production

**Figure 1:** Venison Production 1993-2000

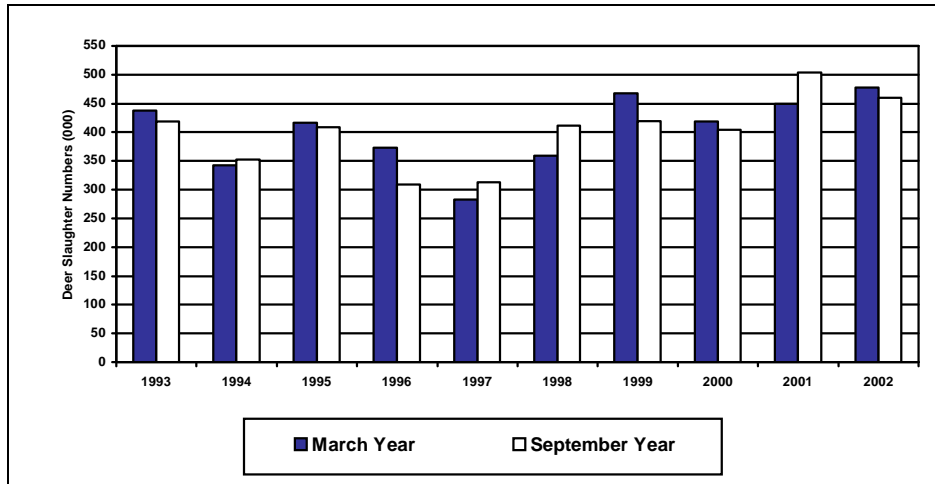
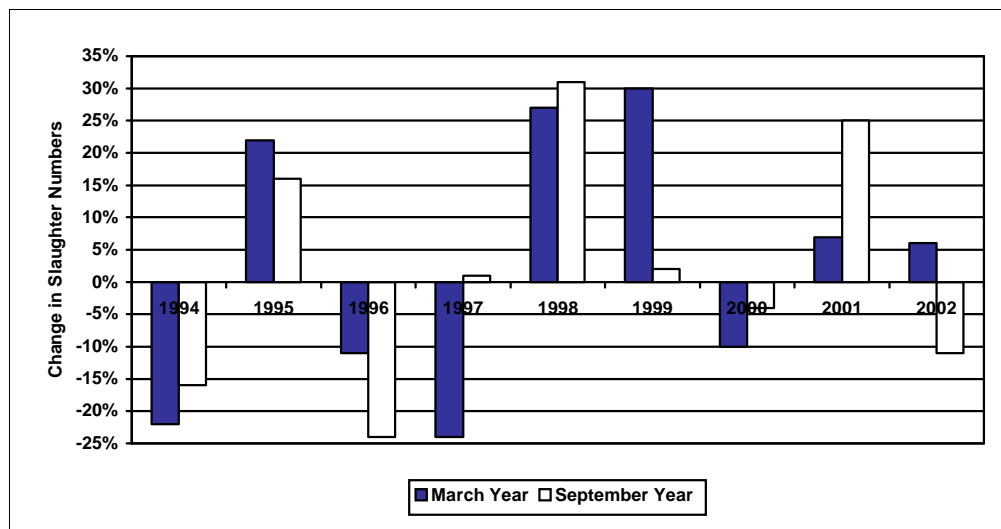


Figure 1, for a March year-end, production was 478 thousand animals, up 6% from 450,000 in 2001. In turn, this was an increase of 7% on the 2000 figure. This sounds like nice steady growth, but when we look at a September year-end we see that production jumped 25% from 404,000 to 504,000 animals last year.

#### 4. Annual changes in venison production

Looking at changes in production another way, Figure 2 below shows changes based on a March year and changes for a September year. The 11% drop shown for the year ended September 2002 is based on our revised forecast production.

Figure 2: Annual % Change in Venison Production



Our market partners have indicated they can manage a  $\pm 10\%$  change in production on an annual basis without damaging the market. By this measure, it's easy to see that we're yet to achieve the consistent stability our markets demand.

In Figure 2, note the difference between production for the September 2001 year end and the March 2002 year end. This is due to the drop in production so far this year.

#### 5. Monthly venison production

Figure 3: Monthly Venison Production

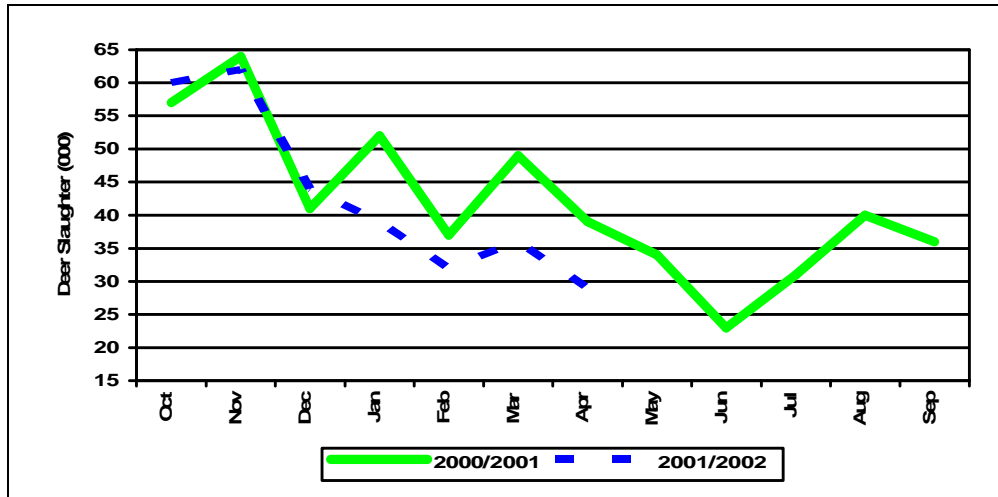


Figure 3 shows for the 6 months to March 2002, production was 9% down on the same period last year at 274 thousand animals. If this trend continues, we would be looking at production of 460 thousand animals – down 12% from initial conservative projections. This has serious budget implications for the GIB this year.

## 6. Total industry exports

Figure 4: Total Deer Industry Exports

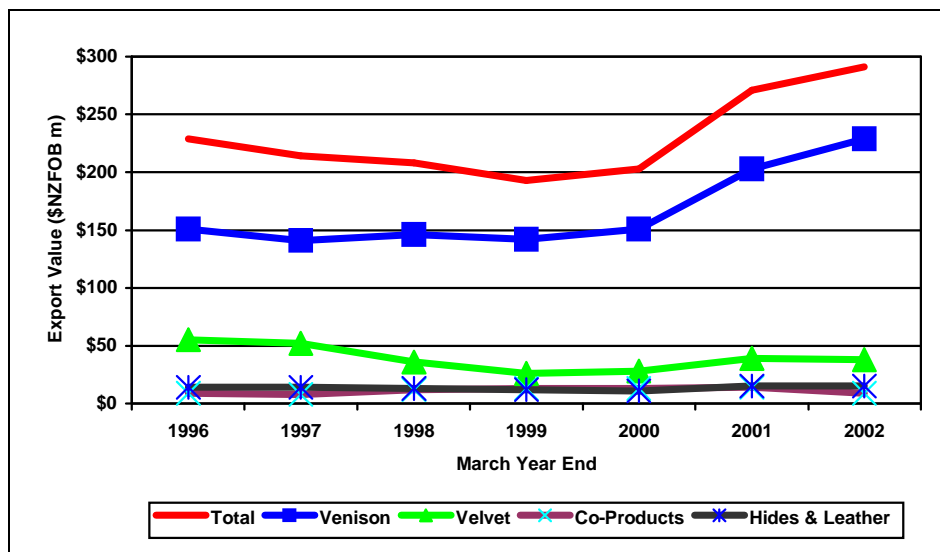
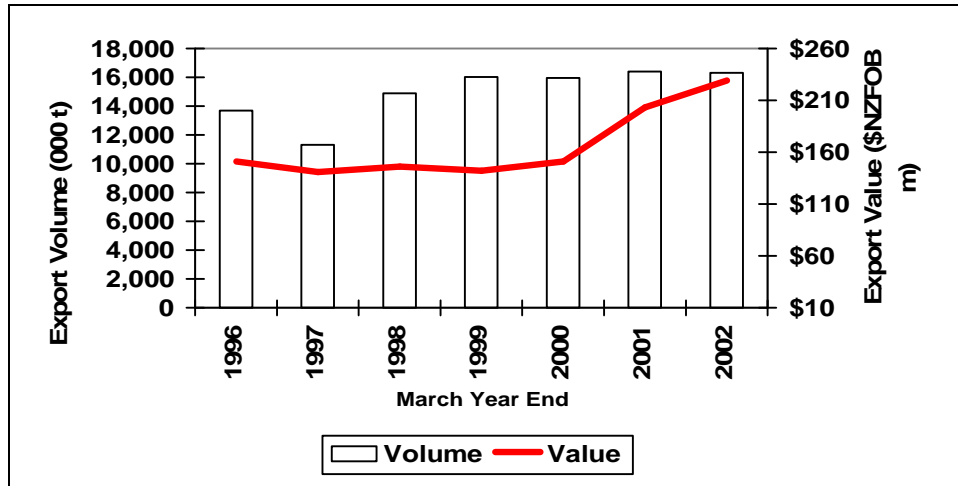


Figure 4 shows total industry export earnings which reached a March year-end record of \$291 million, up 7% on last year. Venison exports at \$229 million make up 84% of total industry earnings and note the sharp rise in the last two years. Velvet at \$38 million makes up 13% of total industry earnings with the balance represented by co-products, hides, skins and leather.

## 7. Venison exports

Figure 5: Venison Export Volume and Value



Looking more closely at venison exports, the bars in Figure 5 show relatively stable export volumes over the last 5 years. Export volumes to March 2002 were 16,300 tonnes, almost the same as the previous year. However, the standout feature is venison export earnings – shown by the line. This shows a 52% increase in export earnings over two years with only a 2% increase in volume representing a 48% increase in the average export price.

These prices have proved unsustainable and damaging.

### 8. Venison schedule and market situation

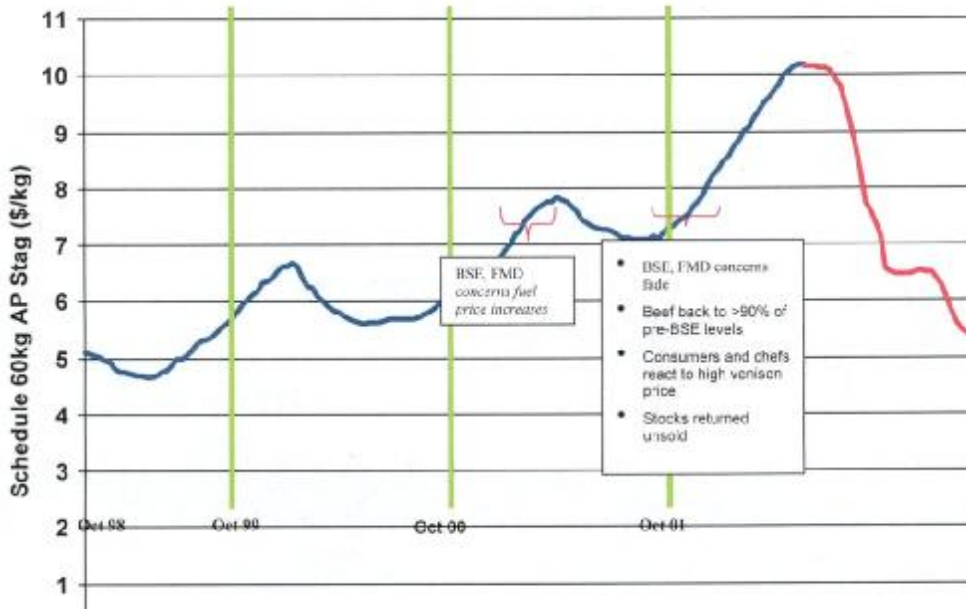
For the last 3 years the deer industry has enjoyed a period of unprecedented stability, growth and prosperity. So it is very disappointing for all sectors from producers through to the market that venison is going through its third boom-bust cycle in a decade.

Figure 6 illustrates the schedule over this 3-year period and describes the key factors in the last year which have resulted in the current market situation.

BSE, combined with Foot & Mouth, led to a market looking for alternative protein options, a situation all parts of the New Zealand industry capitalised on, fuelling prices.

However this unusual, unique situation was going on in the European off-season.

By the time the season kicked in, BSE concerns were largely fading, the Foot & Mouth Disease outbreak was over, European beef consumption was back to more than 90% of pre-BSE levels, the ban on Argentinean beef was over, beef prices were relatively low and a strong resistance to venison prices from chefs and retailers turned these people away from our



product.

**Figure 6:** Venison Schedule and Factors Resulting in Current Market Situation

## **9. Agreed strategic framework**

The agreed venison strategy focuses long term on developing markets for venison outside the traditional game season, targeting new consumer segments. Educating our consumers about leg products is a special focus of our activity.

Joint promotion forms the basis of the venison promotional programme, supported with agreed generic activities and materials. For every dollar of levy funding spent, exporters and their in-market partners are contributing roughly another \$3.

For velvet, the strategy remains focussed on developing new markets. Solid proof of velvet's health benefits is essential before velvet will crack the natural health products market.

Access is the other key part of the velvet strategy. We need better access for frozen velvet into Taiwan, lower duties and fairer inspection systems in Korea and more transparent access into China. We also need improved access for new, convenient product forms into these markets.

## **10. Climate change programme**

The Game Industry Board, through its membership of the Primary Industry Council, is lobbying Government to delay ratification of the Kyoto Protocol. We of course want to see a reduction in emissions and play our role in reducing global warming.

However, we are concerned that with agriculture producing 55% of NZ's emissions, the implications to Pastoral NZ could be severe and have yet to be properly explained:

- we are concerned at the lack of information on costs and policy options
- the lack of adequate consultation with the agriculture sector
- the potential loss of international competitiveness, for example Australia are not ratifying the Protocol therefore NZ will bear additional costs compared to Australian farmers
- lack of evidence to substantiate claims of economic/social and environmental benefits

While the deer industry is co-operating with other Boards and research providers in a research consortium exploring ways to reduce methane emissions, the government's preferred policy of research may be seen as naïve and unacceptably uncertain.

- There are no guarantees that science will provide an answer to ruminant methane emissions
- Any solution may be many years and many, many millions of dollars away
- There is uncertainty as to what level of research funding the government will accept. Government has declared it will levy industry to fund research if voluntarily funded programmes are deemed inadequate

## **11. Welfare**

Animal welfare is an increasing issue for the deer industry for at least three reasons.

### **11.1 Market Concerns**

Firstly, internationally, and especially in the markets most important to our industry like Europe and the USA, there is increasing awareness and publicity about animal welfare. More and more, people are disconnected with the food they eat. They don't have an empathy with rural life, or farming or animals raised for food. They often have an empathy with animals as pets and some of the emotion attached to that relationship is transferred to thinking about animals as food.

To illustrate this point consider the following from the website of PETA – People for the Ethical Treatment of Animals. It’s from a section about how to become a welfare activist. “...you would not eat your dog, so why would you eat a cow”<sup>1</sup>. This highlights the thinking I mentioned with emotions about pets influencing opinions about food.

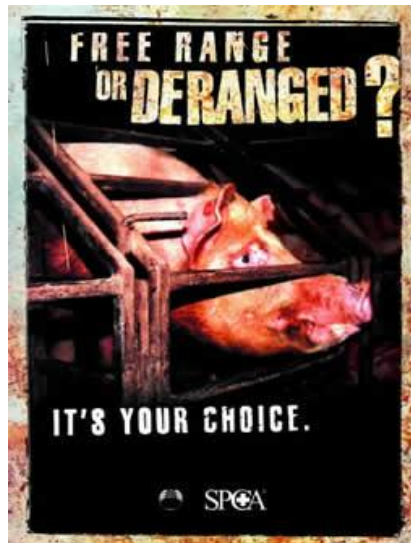
## **11.2 Domestic Lobby**

Secondly this same trend is evident in NZ. While less important from a market perspective, public opinion in NZ can have an impact on the practices an industry is able to undertake. Consider the very successful campaigns run by the RSPCA in relation to sow farrowing crates and battery hens.

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<sup>1</sup> <http://www.peta.org/cmp/actguide1.html>

Figure 7: RSPCA Campaigns<sup>2</sup>



The campaigns include display materials and petitions at Body Shops, prime time television advertising, and a postcard campaign to MPs. You can even download a submission from the SPCA website and email it away<sup>3</sup>. Maybe this is part of the reason the Minister received a whopping 65,000 submissions on the sow farrowing crate issue.

And let me read an excerpt from an RSPCA press release<sup>4</sup> “New Zealand’s largest animal welfare organisation has promised no let-up in aggressive public campaigning until bans are imposed on both sow stalls and battery cages for hens ... confrontational tactics will continue till change [is] achieved on both these issues”

Instead of sow crates or battery cages, just imagine a picture of a stag being velveted, or deer being transported in one of these pictures. We mustn’t forget that a welfare code for deer farming is being developed and will go out for public consultation some time in the next 12 months. Thankfully the RSPCA’s preferred approach is to consult with industries before resorting to these campaigns.

A start has been made on drafting up the first code of welfare for deer. The small writing team met in Wellington during February where a strategy was put in place to work towards successful completion of this document.

The writing team consists of:

Murray Behrent	Alliance Group, Quality Assurance Manager
John Cusdin	DFA Councillor, DEEResearch Board Member, deer farmer
Peter Horocks	Wrightson. Experienced in document writing
Lori Linney	Veterinarian, NZVA Deer Branch
Tony Pearse	DFA Councillor, deer farmer and AgResearch scientist
John Tacon	NZGIB Quality Manager

Other people may be asked to assist the team on an as required basis throughout the exercise. The team will also be assisted by Dr Wayne Ricketts from MAF.

<sup>2</sup> <http://www.rspca.org.nz/campaigns/campaigns.html>

<sup>3</sup> <http://www.rspca.org.nz/campaigns/submission.html>

<sup>4</sup> Undated. Received by author 20 May 2002, also see [http://www.rspca.org.nz/news/news\\_index.html](http://www.rspca.org.nz/news/news_index.html)

Once prepared, the draft code will be circulated throughout the deer industry sectors for comment and alterations before being given to NAWAC who will publish the code for public consultation. Once that process has been completed the code will be ratified.

However we must remember that velvet removal, like all elements of animal management, is a privilege not a right and if we want to maximise our chances of keeping that privilege, we need to ensure that everyone in the industry complies with the requirements of the velvet programme and that our practices and performance continue to improve to keep pace with increasing consumer concerns.

### **11.3 Industry Strategy – New Consumers, New Consumer Concerns**

Thirdly, the industry strategies for both venison and velvet most likely expose the industry to consumers who are more welfare-sensitive than our traditional markets.

For example, to my knowledge, welfare concerns about velvet have never been raised by our customers in Korea. In comparison, whenever we approach healthfood manufacturers or consumers about velvet in the USA, welfare is one of the first issues they raise.

It's also important to realise that we can't isolate welfare concerns as a velvet industry problem, or a transport problem, for example – if it affects deer, it affects the whole deer industry.

A clear illustration of this is the concern raised by the major UK supermarket. A major barrier to them stocking NZ venison is their concern about New Zealand's velvet removal, or more accurately, their concern about being associated with negative publicity associated with velvet removal.

In the USA, Burger King is reported to have tightened up its welfare requirements imposed on suppliers after PETA's Murder King Campaign<sup>5</sup>, and Safeway, a USA supermarket agreed to implement welfare criteria for suppliers after a PETA boycott<sup>6</sup>.

It's not just velvet removal that's an issue. For any practice that involves animals and impacts their behaviour or well-being we need to ask ourselves – what would a consumer in Munich, London or New York think if they saw this?

The welfare issues that we will face will be driven by consumer perception fuelled by media hype and most likely based on emotion.

It doesn't matter what we think is acceptable, or even, to an extent, what we can prove with science is acceptable, though of course we must prepare ourselves with as much robust science as possible. However, the market will be the final judge and we have to be ready to meet that challenge.

In recognition of this, welfare is an area that we have targeted for increased work in the next 12 months.

## **12. Johne's Disease**

Johne's Disease has been recognised as a very serious issue for the New Zealand deer industry to address. This has seen Johne's Disease in Deer given priority in DEEResearch's funding of research projects and work now underway in developing a broader industry strategy to address Johne's in alignment with the research strategy.

As well as being an issue in a productive and welfare sense, there is increasing international publicity about a possible link between Johne's Disease and Crohn's disease in humans. As well as representing a potential trade barrier, there is also the possibility that New Zealand's

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<sup>5</sup> <http://www.peta-online.org/search/news/row.asp?id=207>. Press release dated 28 June 2001

<sup>6</sup> <http://www.shameway.com/5-15victory.html>



incidence of Johne's Disease may be used against our exports by competitors who have are working hard to eradicate the disease.

### **13. Feeds regulations**

MAF has signalled that it will be undertaking a review of the Biosecurity (Ruminant Protein) Regulations which provide the current ban on the feeding of ruminant protein to ruminants.

Despite New Zealand's BSE-free status, the ability to provide assurances to international customers that New Zealand deer are not fed ruminant protein was raised at the most important issue for the GIB to address by a meeting of CEOs and senior management from all venison exporters in April 2001.

Although MAF appear to be taking a pure risk-based approach, the New Zealand venison industry believes that more should be done to ensure New Zealand can provide these assurances. Scientific assurances are seen as necessary but insufficient for meeting customer concerns – their perceptions and zero-risk- approach mean that extra steps should be taken, even if not strictly justifiable on scientific grounds.

In consultation with industry, the GIB has submitted that the following changes should be made to the Biosecurity (Ruminant Protein) Regulations.

#### **13.1 Change the offence of feeding ruminant protein to ruminants towards absolute liability**

Currently the Regulations provide that for an offence relating to feeding of ruminant protein to ruminants - a person must knowingly feed or allow ruminant protein to be fed to a ruminant. This could be changed so that if a person feeds or allows ruminant protein to be fed that person commits an offence regardless of knowledge, unless they have taken all reasonable steps to be assured that feed did not contain ruminant protein.

This would put the onus on producers to undertake due diligence to make sure the feeds they use do not contain ruminant protein and would encourage compliance with the labelling requirements of the Regulations.

However, discussions with MAF suggest that submissions on an upcoming review of the Regulations propose to remove other offences of absolute liability (which don't require knowledge for an offence) from the Regulations – this signals a move away from the type of offence suggested above.

#### **13.2 Change the definition of 'Operators' to include any person/company using ruminant protein.**

Currently the requirement for a ruminant protein control programme only applies to companies:

- processing ruminant protein and processing non-ruminant protein for feeding to ruminants, or
- processing ruminant protein and feed for ruminants.

The control programme is required to protect against cross-contamination and mislabelling, which would result in ruminants being fed ruminant protein.

Companies that process ruminant protein for non-ruminants (eg pork and poultry feeds) are not required to have a control programme. However, at least some aspects of a control programme would be useful in achieving the goals of the Regulations even if applied to these companies. For example, control programmes must include systems to ensure that feed is labelled correctly. Even if a company is producing ruminant protein for non-ruminants a control system to ensure correct labelling would be beneficial in furthering the objects of the Regulations.

#### **13.3 Increased penalties**

Given the severity of the possible consequences for farmers, processors and the New Zealand economy if New Zealand gets BSE or even if New Zealand's systems of assurance are called into question, it may be appropriate that the offences under the Regulations should carry much larger maximum fines.

#### **13.4 Specified Monitoring**

MAF, in consultation with industry decided (ie exercised a discretionary power) to conduct a sampling and testing programme of 300 samples in 2001.

Given the importance of the issue, the Regulations should be written with a specific requirement on MAF to undertake appropriate sampling and testing to demonstrate compliance with the Regulations.

Initial discussions with MAF suggest they are unlikely to support these suggested changes. Support has been sought from organisations such as Meat NZ, Meat Industry Association, and Feed Manufacturers Association.

### **14. DEEResearch**

DEEResearch Ltd is a joint venture between AgResearch, Deer Farmers Association and Game Industry Board which undertakes research into deer production and processing for the benefit of the New Zealand deer industry. The Board of DEEResearch comprises representatives of each of the Joint Venture partners as well as representatives of the venison processing/ exporting sector and universities.

DEEResearch is funded by FRST through AgResearch and by deer industry levies collected by the Game Industry Board and Deer Farmers' Association and aims to assist the profitable development of the deer industry through industry-good research in the following areas:

- Accelerated learning and technology transfer
- Productivity gains
- Sustainable production and the environment
- Deer health and welfare
- Market access and development
- New technologies for wealth creation
- Science networks and world's best practice

Commissioning a series of research reviews was an important first step for DEEResearch. The reviews cover the gambit of research relevant to the deer industry and serve multiple purposes. First, they are useful in themselves as a collection of all the information available in areas of specific interest. Secondly they are useful for DEEResearch's research investment decisions – they identify gaps in the information and also ensure research isn't duplicated.

Co-operation with other agricultural organisations is a feature of the programme with a third of the funding earmarked for the current year directed at supporting projects in co-operation with organisations such as Dairy Insight, Meat NZ, Wools of New Zealand, the Animal Health Board, Wrightson and the Fertiliser Manufacturers' Research Association. These projects include research consortia looking at the clover genome and assessing options for reducing methane emissions from sheep, cattle and deer.

Other projects being funded co-operatively relate to biological control methods for clover root weevil, the development of a template for industry environmental management systems, developing a new test for diagnosing bovine Tb in deer and assessing the impact of increasing molybdenum on the copper status of young deer.

Deer health issues prioritised for research include Johne's disease, bovine Tb leptospirosis. The Johne's research co-ordinated by AgResearch will focus on developing a vaccine to resolve issues with the current vaccine which interferes with skin tests for bovine Tb. The Tb research is conducted by Otago University and aims at establishing the heritability of Tb resistance in deer. Another project aims at improving the test used to diagnose bovine Tb in

deer. The leptospirosis research at Massey University aims to establish the regional prevalence of the disease in the deer industry, assess management systems to reduce the chances of infection in herds and investigate the effectiveness of a vaccination strategy.

Research with an environmental theme also features strongly in the DEEResearch programme. As well as participating with the methane consortia and the group of industries developing a template for environmental management systems, DEEResearch is supporting the Deer Farmers Landcare Manual – a practical manual of environmental best practice for deer farming.

Productivity research includes looking at the use of roughage to improve spring growth potential and the impact of genotype on weight and age thresholds for reproduction.

However, research is not only being undertaken behind the farm gate. An important part of the DEEResearch programme is aimed at assisting processors and exporters to meet market needs and address safety and market access issues. AgResearch is investigating the development of a rapid test for the identification of agents associated with product spoilage on carcasses. This would help ensure that premium chilled product gets to market in the best condition possible.

The levy-funded projects undertaken by DEEResearch are complemented by an even larger programme undertaken by AgResearch with government funding from FRST (Foundation for Research, Science and Technology). The detail of this part of the programme is still being finalised, but funding support from FRST has been confirmed at \$1.5 million per annum for the next 4 years. There is a natural fit between the two sides of the programme, with the industry programme focussed on productivity and more immediate needs, and the AgResearch programme focussed on more fundamental science with a longer-term horizon, in line with government research funding directions.

## **15. VARNZ**

As mentioned previously in this paper, science proving velvet's health benefits is fundamental to support moves to build new markets for velvet outside traditional markets where velvet is understood and accepted.

Velvet Antler Research New Zealand Ltd ("VARNZ") is the deer industry's joint venture vehicle with AgResearch to meet these scientific objectives. As well as other functions, VARNZ research looks at velvet's health benefits and works to uncover new, novel uses of velvet.

Given that VARNZ has been in operation since 1994, VARNZ directors and executive decided it is time to take a good look at the programme and what it has achieved to date and where the future could lie.

A review was conducted in two stages.

- 1 VARNZ management attempted to quantify the benefit of the VARNZ Programme. Using @-Risk analysis, based on the assumptions set out in the review, the value of the programme was estimated as having a mean Net Present Value of \$21.2 million (after the investment of \$10.1 million was accounted for). This 'Internal Review' was audited by Polson Higgs & Co who supported the assumptions as conservative and the process as robust.
- 2 Peter Molan, an independent expert in the field of natural health products, conducted an 'External Review' of the VARNZ Programme and broadly endorsed the direction and strategy and commented on the specific projects undertaken.

This was a very important exercise both from an accountability perspective and also to ensure that the industry's velvet research programme is well positioned to assist the New Zealand velvet industry to achieve its strategic objectives.

## **Summary**

In summary, it has been a tumultuous time for the deer industry with difficult market conditions largely caused by the exceptional prices derived from the market last year and a range of large issues looming.

However, continuing developments in deer industry structures and programmes see the industry well placed to address those issues collectively as evidenced by the current unprecedented level of promotional and market development activity taking place in the industry's main markets.

Industry restructuring – to form Deer Industry New Zealand, with the recruitment of a dedicated Producer Executive, will further improve the industry's ability to integrate programmes and responses to issues across all sectors.