

Deer Industry News

Conference Returns to South Canterbury



Pet Effect

STRONG DEMAND FROM PETFOOD SECTOR UNDERPINS SCHEDULE



Letting it Settle

DETAINMENT BUNDS OFFER PROMISE AS WAY TO PREVENT P AND SEDIMENT LOSS



Life of a Parasite

NEW RESEARCH PROGRAMME WILL REVEAL MORE ABOUT PARASITE LIFECYCLES

In-yard fingertip access to full velvetting data

TSi 2 Livestock Manager

The top of the line choice in Weigh Scales, the TSi is an all in one weighing and data collection system for improved livestock performance:



View the pedigree and progeny of an animal in the yard and view summary stats on its progeny.

Review full weigh history for an animal at the touch of a button.

Includes APS Professional, simply the best stock analysis software available and extremely easy to use.

For more information call your local Gallagher Territory Manager on 0800 731 500

0800 731 500
www.gallagher.com

80 YEARS OF —
CELEBRATING
— THE SPARK



Deer Industry News

OFFICIAL MAGAZINE OF DEER INDUSTRY NEW ZEALAND AND THE NEW ZEALAND DEER FARMERS' ASSOCIATION

ISSUE 89 | APRIL/MAY 2018

ISSN 1176-0753

Contents

Editorial 3

Deer Industry Conference

 Conference programme 4

Industry News

 Pampered pets nipping at our heels . . . 9

 Broadleaf customers experience

 New Zealand story first hand 12

 Adaptable venison overcoming chef 'saddle of the brain' 18

People

 Obituary: Warwick Gregory 8

Environment

 Plugging P: Detainment bunds offer promise for deer farms. 14

Research

 Parasite research: No more shots in the dark? 16

Markets

 Velvet update 19

 Venison update 20

Cover: The Deer Industry Conference returns to South Canterbury this year, and Timaru's Caroline Bay Hall, with awards night entertainment from the fabulous Bitches' Box. The two days of conference are followed by a not-to-be missed tour of some of the region's iconic deer farming properties in the Rangitata Gorge. Main photo: Phil Stewart.

EDITORIAL AND ADVERTISING ENQUIRIES
Words & Pictures, 11/94 Dixon Street, Wellington,
Ph 04 384 4688, 021 620 399,
email phil@wordpict.co.nz

CIRCULATION ENQUIRIES
Deer Industry New Zealand, PO Box 10-702,
Wellington, Ph 04 471 6114, email info@deernz.org

Deer Industry News is published by Deer Industry New Zealand in February, April, June, August, October and December. It is circulated to all known deer farmers, processors, exporters and others with an interest in the deer industry. The opinions expressed in *Deer Industry News* do not necessarily reflect the views of Deer Industry New Zealand or the New Zealand Deer Farmers' Association.

EDITOR Phil Stewart, Words & Pictures

Biosecurity our biggest challenge

It's a privileged position to sell high-end primary products to the world and New Zealand needs to make the most of its natural advantages.

THIS GOVERNMENT HAS an important role to lift productivity within resource limits and increase the value of what we produce so that farmers, rural communities and all New Zealanders benefit. Our primary sector stands to benefit by a shift towards value over volume – where New Zealand sustainably produces the best primary sector products for the world's most discerning consumers.

While the deer industry is relatively young with around 1650 farmers growing about 1 million deer, I note its title as the number one source of farm-raised venison worldwide and the great shape of velvet, in particular, being made into prized medicinal products and a tripling of velvet export receipts to \$60m over the past five years – with smart partnerships made with valuable markets such as South Korea. That's testament to your vision to expand from the supply of base raw materials to an ingredients supplier for large consumer brands.

This takes vision and leadership and I acknowledge the deer industry has made strides towards value-add production and on-farm environmental improvements. I'm confident farmers are adapting, like they've done many times before, to meet consumer needs and expectations.

Expanding trade links with countries crying out for our pristine products is key to our success. New Zealand's environmental and animal welfare standards are incredibly high – but we need to get on the front foot and sell this story of our superior products to global markets that are demanding greater traceability and accountability.

Last month we signed the 11-country CPTPP in Chile, with the team negotiating some complex issues to seal the deal. New Zealand has never had a free trade agreement with four of the countries: Japan, Canada, Mexico and Peru. This is a major achievement and will help boost revenue for our primary sector exporters in key markets.

As the world becomes smaller, biosecurity threats are more persistent and pests and diseases are harder to keep from our borders. Biosecurity is our biggest challenge. It's the reason I am reorganising the Ministry for Primary Industries to focus on core tasks of biosecurity, forestry, fisheries and food safety – you'll see those new brands shortly.

During the past year, outbreaks of *Mycoplasma bovis*, myrtle rust and oyster parasite *Bonamia ostreae* have highlighted the damage that can be done to our unique flora, fauna and vital industries.

The *Mycoplasma bovis* outbreak has shown us that where farmers have complied with NAIT, the tracing of animals has been quick and accurate, whereas those who haven't complied have made this a lot more difficult and significantly hindered the response.

Deer farmers will have followed this closely – overall compliance with NAIT needs to improve. Later this year, farmers will get their say about ways to improve NAIT and make it easier to use. I encourage you to take part, as everyone has a role in protecting New Zealand from biosecurity threats.

I've committed to upgrading the Biosecurity Act as this underpins a successful primary sector and our unique way of life and I will continue to do what it takes to support our farming sector. ■

– Damien O'Connor, Minister of Agriculture, Biosecurity, Food Safety and Rural Communities



Hon. Damien O'Connor (right) at the signing of a memorandum between Yuhan Corporation and the New Zealand deer industry.



TUESDAY 15th - THURSDAY 17th MAY 2018 | CAROLINE BAY HALL, TIMARU

It's all about staying ahead of the game at the 2018 Deer Industry Conference, to be held in the delightful Caroline Bay Hall.

WE'VE WORKED HARD this year to provide a flexible range of options that will cater to the needs of busy people. New features this year include:

- Day registrations for Day one (Tuesday 15 May), with or without Welcome Function.

Registration options and costs	Before 2 May	After 2 May
Full conference and all functions	\$515.00	\$570.00
Farming partnership full registration	\$340.00	72kg
Day registration: Tuesday with welcome	\$220.00	\$250.00
Farming partnership Tuesday with welcome	\$145.20	
Day registration: Wednesday with dinner	\$360.00	\$400.00
Farming partnership with dinner	\$238.00	
Day only registration: Tuesday	\$127.65	\$140.50
Farming partnership Tuesday only	\$82.80	
Day only registration: Wednesday	\$230.00	\$253.00
Farming partnership Wednesday only	\$151.80	
SC/NO DFA Field day: Transport and catering	\$46.00	
Sponsors additional delegate	\$490.00	
Welcome function dinner: Additional ticket	\$80.00	
Awards conference dinner: Additional ticket	\$110.00	

- Day registrations for Day two (Wednesday 16 May), with or without Awards Dinner.
- Discounted registration for 2nd+ delegate(s) coming from a single farming business.
- Child care facilities.

And of course you can simply register for the whole conference, followed if you wish by a tour of the iconic Mount Peel and Mesopotamia Stations in the stunning Rangitata Valley on Thursday 17 May, hosted by the NZDFA South Canterbury/North Otago Branch. As usual, we have Early Bird discounts available but you'll need to be quick!

NZDFA: Notice of Annual General Meeting

Notice is hereby given that the 43rd Annual General Meeting of the New Zealand Deer Farmers' Association (Inc) will be held at the Caroline Bay Hall, Timaru on Tuesday, 15 May 2018, commencing at 12.00 noon.

The Chairman and Executive Committee of the NZDFA invite all members of the NZDFA, industry levy payers and interested parties to attend.

NZDFA Executive Committee, Selection and Appointments Panel and appointments to DINZ Board

All existing office holders were returned as single nominations for their current positions. For details of nominations and appointments please refer to NZDFA 2018 Annual Report when available or *Stagline Online* issue 128, accessible to NZDFA members online at <https://deernz.org/stagline-issues/2018-04-01>



WILKINS FARMING CO
— BREEDING FOR THE FUTURE —

**PROUD PARTNERS OF
THE 2018 DEER INDUSTRY
CONFERENCE**

We look forward to seeing you there

www.wilkinsfarming.co.nz



Registration

Please visit the conference website: <https://bit.ly/2q4Fx0S> for full details and to register. With all of the options available this year, there is a wider than usual range of cost options (see left-hand column on previous page).

Accommodation

There are plenty of accommodation options available. Visit the conference website accommodation page to see what's available: <https://bit.ly/2HcQWTS>

Featured speakers

As well as updates from the NZDFA and DINZ executive team, our programme includes high-profile speakers who are bound to get you thinking and talking about our future challenges and opportunities. This year there is a strong focus on the environment, culminating in the launch of the Deer Industry Environmental Operating Code of Practice, a major milestone in the deer industry's drive to improve environmental performance.

Craig Rispin: Business futurist and innovation expert



Award-winning speaker Craig Rispin has addressed audiences as large as 16,000 people on five continents and has consulted with CEOs of leading companies worldwide.

Craig's expertise is in emerging business, people and technology trends – and how companies can profit from them.

He has over 20 years' experience working where the future has been created – with some of the world's most innovative companies in the IT, consumer electronics, internet and broadcasting industries.

Blake Holgate: Animal Protein & Sustainable Analyst RaboResearch Food and Agribusiness



Blake joined the bank in 2013 as a Rural Manager focusing on sustainable farm systems. In this role he has provided the bank with research and analysis on the impact that impending environmental regulations will have on New Zealand's agricultural sector, and helped clients understand and plan for the changes.

Blake grew up on a sheep and beef

farm in South Otago, which he now farms in partnership with his parents. He practised as an environmental and public lawyer before completing an MBA at the University of Otago in 2012.

Lain Jager: Former CEO, Zespri



Lain Jager completed 9 years as Chief Executive Officer of kiwifruit marketer Zespri before standing down in September 2017. He is involved in interesting projects as an investor including the Spring Sheep Milk Company, the Redwoods Treewalk Rotorua, and a Zespri Gold Kiwifruit syndicate. Lain has a particular interest in Agribusiness strategy and brings deep insight into marketing and innovation leadership, international business, supply chain and human resources.



Mike Petersen, New Zealand Special Agricultural Trade Envoy

Mike Petersen has been New Zealand's Special Agricultural Trade Envoy since 2013. The role was established in close consultation with New Zealand's agriculture sector to bring a farmer's perspective to international trade in food and agriculture and to build partnerships with farming organisations offshore.

Drawing on his considerable farming and private sector experience, Mike promotes greater understanding of New Zealand's agricultural sector interests from the perspective of a practising farmer.

His perspectives include innovations in sustainable farming, sector efficiency and productivity, as well as discussing New Zealand's evolution into a successful trading nation despite being one of the most isolated countries in the world.

We have invited Mike to present during the environment session with a focus on his recent commentary following the signing of the CPTPP that New Zealand needs to revamp its primary sector story with an emphasis on sustainability if we are to expand the reach of exporters in existing markets and break into new ones. He says lessons can be taken from other countries like Ireland with its "Origin Green" programme.

These programmes have a universally recognisable "stamp of authenticity" that says animal welfare, food safety and environmental standards are being adhered, Mike says. "It's the kind of stamp we need."

continued on page 6

Available from all Rural Stores

NAIT & Two Piece tags

Superior retention • Outstanding readability
Unsurpassed ease of application

www.zeetags.co.nz

BONUS OFFER
FREE
TAGGER
TO NEW ZEETAGS
USERS WITH THEIR
FIRST ORDER
OF 50 OR MORE
NAIT TAGS

MY FARM
%1588

2017ZT001_19.12

Conference: continued

Guy Salmon, Executive Director Ecologic Foundation



Guy is an environmental specialist with a broad background, working in policy advice, consulting and research roles. His comparative study of environmental decision-making in New Zealand and the Nordic countries (with collaborators at the University of Helsinki) highlighted the power of collaborative governance for integrating economic and environmental outcomes.

He subsequently championed the adoption of collaborative governance practices in New Zealand, as well as researching their operation in several case studies. He has worked as a convenor, project manager, adviser and participant in a range of consensus-building policy processes in both rural and urban settings.

Guy has held many positions providing policy advice to successive governments and the boards of Crown entities. He has advised governments on climate change, water management, electricity markets, fisheries, forestry, land transport and overseas development assistance. He has also worked in developing countries in the Pacific, especially in Papua New Guinea.

A third-generation conservationist, Guy co-founded the Native Forests Action Council in 1975. He led the native forest conservation movement, whose many successes culminated in the abolition of the Forest Service and creation of the Department of Conservation in 1987. Since then, as chief executive of the Maruia Society and later the Ecologic Foundation, he has focused on the challenge of integrating economic and environmental perspectives in decision-making.

REGISTER NOW!
<https://bit.ly/2q4Fx0S>

Conference programme*

Tuesday 15 May	Pre-Conference
8.00–11.00am	NZDFA Branch Chairs pre conference meeting (Venue TBC)
8.00–11.30am	DINZ Board meeting (Benvenue Comfort Inn)
11.00am–12.00pm	Light lunch available
12.00–1.30pm	NZDFA 43rd AGM, Caroline Bay Hall. Chair: David Morgan

“Staying Ahead of the Game” 2018 Deer Industry Conference

2.00–4.15pm	Technical session DEEResearch update and P2P “from the farm” reporting Co-chairs Catharine Sayer, DINZ Science and Policy Manager, and Innes Moffat, P2P Project Manager
2.00–3.00pm	DEEResearch programme TBC (5 x 15 minute updates)
3.00–4.00pm	<ul style="list-style-type: none"> • South Canterbury vet Hayden Barker and deer farmer Tom Macfarlane report on their experiences with the Deer Health Review • Feeding theme group: Tools developed for improved nutrition, plus a farmer’s experience: Jason Archer • Launching the farm systems description and feeding concept: Jamie Gordon • Headlines from the 2017 CINTA Report: Innes Moffat • Deer breeding & use of EBVs; with first hand and farmer experience: Sharon McIntyre
Applying the P2P experiences	
4.00–4.15pm	<ul style="list-style-type: none"> • 15 minutes for conclusions and Q&A across all research, P2P topics and speakers
4.15–4.40	Afternoon tea
4.40–5.15pm	Progress on changes to National Tb testing programme, risk-based testing and industry funding. NAIT Review update. Q&A Michelle Edge, CEO OSPRI
5.15–5.35pm	Next Generation “Future leadership: Issues and expectations” A SC/NO Next Generation panel talking to industry leaders. Facilitator: Kris Orange. DINZ Board and DFA.

- Let’s show the world what makes our our industry special.
- No need to send prints to enter!
- Just submit your entry form and digital photos online.
- Entry fee reduced to a flat \$5 per photo entered!
- Entry deadline 9 May.

For an entry form contact:
Cenwynn Philip, Deer Industry New Zealand, 04 471 6110, or cenwynn.philip@deernz.org
 or download form from www.deernz.org/MSD-photo-competition

MSD Animal Health Photographic Awards

Don’t forget to send in your entry!

5.35–5.45pm **International Deer Calendar: Overview**
Fourth International Antler Science and Product Technology Conference Changchun China (Catharine Sayer) plus World Deer Farming Congress VII, Altai Russia, August 2018, Natalia Sorokina CEO Russian Deer Farmers' Association/Tony Pearse

7.00–11.00pm **Welcome Function, Landing Services Building**
Five-course degustation and Table Quiz night Hosted by Silver Fern Farms

Note: For technical sessions and evening event the conference will be joined by delegates to the 2018 NZ Veterinary Association Deer Branch "Cervetec 2018" conference

Wednesday 16 May **Day 2 "Staying Ahead of the Game" Agribusiness session**

7.15–8.15am **Local Rural Business Leaders Breakfast with DINZ (Sopheze)**
Conference breakfast Caroline Bay Hall (Delegates)

8.30–9.30am **Conference Session 1**

8.30–8.45am TBC, Opening address The Hon Damien O'Connor, Minister of Agriculture.

8.45–9.10am **Chair: DINZ Opening Address**
Welcome and State of the Industry Overview
Chair DINZ, Ian Walker and CEO DINZ, Dan Coup

9.10–9.30am **Rabobank address: Blake Holgate, Animal proteins specialist**
"Another Good Year...Spend It Wisely"

9.30–10.30am **"Staying Ahead of the Game" Keynote Speaker Craig Rispin**
"Going Global"

10.30–11.00am **Morning tea**

11.00am–12.30pm **Venison: marketing and the markets**
Chair: Ian Walker

11.00am–12.00pm **Keynote speaker Lain Jager, former CEO, Zespri**
"Global Food and Fibre (The competitive strategy)" The Zespri story including a perspective on NZ Agribusiness. Can venison be the next kiwifruit?

12.00pm–12.30pm **Venison and market session: Venison Marketing Manager Nick Taylor plus venison exporters' panel**
6 X 5-minute presentations on venison market innovation.

12.30–1.30pm Lunch: Industry exhibition area

1.30–2.30pm **Velvet Antler**
2017 Velvet antler markets, performance and future prospects (Rhys Griffiths)
The Regulatory Control scheme 2017 update and beyond (NVSB)
Velvet antler processor marketer report and discussion with Q&A

2.30–2.45pm **Environment**
Scene setter: Speaker TBC (With apologies - Minister for the Environment is unable to attend.)

continued on page 8

0800 843 024
www.farmquip.co

FARMQUIP
ANIMAL MANAGEMENT SOLUTIONS



Heenan Work Room

- The deer are held firmly and comfortably and return to the handler time after time without resistance
- Both platforms raise and lower with the walls, so the operator is always in a commanding and safer position above the animal



Heenan Maxi Crush

- Is designed for even larger animals
- Heavier duty padding
- Operation controls on fixed side



Heenan Weigh Bridge

- Compact and efficient weighing and drafting
- 3 way drafting
- Air operation
- Roomy design - Big on space
- Bolt together design for easy installation



Manufacturers of the original Heenan Deer products.
Call us for a free quote.

Conference: continued

2.45–3.15pm Keynote 1	Mike Petersen, Special Agricultural Trade Envoy "NZ needs a new story" A perspective on trade, the CPTPP and environmental stewardship
3.15–3.45pm	Afternoon tea
3.45–4.15 Keynote 2	Guy Salmon, CEO Ecologic Foundation "The environment, society, farming and evolving expectations"
4.15–4.45pm Farmer panel	Meanwhile back on the farm: The Next Generation A perspective on environmental stewardship, legacy and succession in farming: Hamish and Anna Orbell, Hamish and Julia Mckenzie Ryan O'Sullivan (Nuffield scholar 2017) Global food production and the expectations of farming environment stewardship
4.45–5.00pm	Deer industry Environmental Operating Code of Practice Launch
5.00–5.20pm	Closing thoughts: Q&A session with the DINZ Board
5.20–5.40pm	Closing thoughts: Craig Rispin, conference summary and feedback

Social

7.00–7.30pm

7.30–7.45pm

7.45pm

~10.00pm
Entertainment

2018 Awards Dinner and entertainment

Pre-dinner drinks

Seated for awards and dinner

Welcome: Alliance Group Ltd
2018 Awards Dinner, hosted By Alliance Group Ltd
Matuschka Award NZDFA 2018
Deer Industry Award 2018

"Sons of a Bitch" from the hilarious award-winning comedy duo "The Bitches' Box"

Setting: The local town vet. Why are they there? Who will they meet? Is this show the answer to bridging the urban/rural divide? Probably not, but you should come anyway. Country bumpkin Amelia Dunbar and city slicker Emma Newborn once again present their signature fast-paced, multi-character, new show.

For further information please contact:

- Tony Pearse at tony.pearse@deernz.org 021 719 038 or
 - Pat Johnson pat@dcms.co.nz 027 215 9807 or 03 477 1377
- *Programme accurate as at 10 April – subject to change.

Obituary: James Warwick Gregory

Another of the industry's pioneers, Warwick Gregory, passed away on 8 January 2018, aged 85. Warwick developed his breeding skills in the Romney sheep industry and won many major prizes and accolades for this.

HIS INTEREST IN deer began at an early age through hunting deer in Fiordland any many other areas around the Canterbury high country. His foray into farming deer started with the capture of hinds and stags from the well-known Rakaia herd. He was accompanied on this adventure by another industry pioneer, Bob Swann. Other stock in his foundation herd were purchased from Erewhon and Mesopotamia Stations.

Warwick and his wife June shifted their deer farming operation from Ashburton to Redwoods Valley in Tasman in 1981, where they concentrated on velvet genetics. They worked with Youn Lee and Charlie Ford of National Deer Horn to breed a style of velvet antler that the processors wanted. Warwick had strong views on this and did not suffer fools lightly.

The Gregorys and their stags won many local and national competitions. Warwick was always prepared to give help and advice to those prepared to listen. He also made sure that you had tried to work it out yourself first.

Warwick and the late Norm Parkes were foundation members of the Nelson Branch of the NZDFA and both served as branch chairs, encouraging others to join the local branch and organising field days, sponsors, speakers and so on. They enabled many new entrants to the industry to get the latest information.

He attended many branch chairs' meetings and national conferences and if you knew Warwick you will recall he always had his say – sometimes upsetting a few who thought they knew better.

Warwick also went on many overseas trips with deer farmers, including to South Africa, Europe and the United Kingdom to broaden his and their knowledge of the way things should be.

At a local level he also served on Federated Farmers, Tasman District Council Rural Services and the Nelson Branch of the National Party, a job he often described as "keeping young Nick's feet on the ground".

Those of us who had visited the Gregorys on their farm all remember the meals prepared by June, who also kept the farm running during Warwick's frequent absences. Sadly, June passed away last year.

Warwick and June are survived by daughter Nicola, her husband Gareth and granddaughter Elodie. The New Zealand deer industry extends its condolences to Warwick's family. ■

– contributed by Trevor Norriss



Warwick Gregory.

Pampered pets nipping at our heels

If you keep an eye on the venison schedule – and who doesn't enjoy that right now – you'll have noticed something unusual. For the past year or so, it has strayed from its usual seasonal pattern. *Deer Industry News* Editor **Phil Stewart** explains why.

NORMALLY THE VENISON schedule follows a modest and flattish track from January to about July. That's followed by a nice chilled season bump from around August to the end of October, then a gentle decline down through early summer as the chilled season finishes and the frozen market takes over in the new year.

But in 2017, that pattern was disrupted. The schedule started the year just under \$8. That was already pretty healthy, due to strong market prices in Europe and other markets coupled with the success of marketing companies' activities diversifying markets – both geographically and also in terms of season. Then it started a steady climb throughout the year, reaching just under \$10 by the time of the traditional "spring peak" in October.

From then on, things got a bit strange. Instead of falling as usual, the schedule kept on climbing and climbing. By the end of March it was between \$10.40 and \$11. Just for perspective, go back three years and the schedule was barely above \$6 by this point.

So what's going on?

It turns out that it's not human consumers, but discerning cats and dogs that have been nipping at the heels of venison prices.

For many years, the petfood industry has taken venison from the bones that remain after processing. Specialist companies such as Meateor Foods (Hastings and Dunedin) and Pasture Petfoods (Waipukurau) produce mechanically deboned meat (MDM) which is in turn supplied to petfood manufacturers. Bone is ground into a meal, which can also find its way into some petfoods.

This trade has been in place for some years, but what has changed is the prices being paid for what is traditionally seen as a low-value byproduct. The skills of boners at our meat plants mean that there isn't a lot left on the bones once they've done their work, but what is left is now highly valued.

Venison has taken off as an ingredient in petfoods at the premium end of the market and suddenly manufacturers can't get enough of the stuff.



Venison features in the Zivi Peak petfood range.

Gerard Hickey, Managing Director of Firstlight Foods, says the aberration in the venison schedule this season has been a matter of timing. "The end of the spring schedule peak coincides with the new contracts for supply of MDM and other products for the petfood industry on 1 November," he explains.

These new contracts reflect a worldwide boom in petcare products, and prices paid for venison and offal rose sharply. The effect of this was to keep upward pressure on the schedule just at the time when production switches from chilled to frozen, at lower prices.

While it's not the only factor at play – tight supply and growth in sales outside traditional regions and season are also having an effect – venison marketing companies agree that the petfood sector has made a significant difference this season. (North America is now our biggest venison market by value and volume.)

Hickey says the influence of the petfood market is a positive one. "It adds another leg to the stool of products from deer, alongside venison, velvet and co-products."

Andy Duncan of Duncan New Zealand is also upbeat about the trend. "The emergence of this very significant demand for venison from the petfood companies should be viewed very positively," Duncan says. "The pet food manufacturers who are the customers of this industry include many very large credible companies, such as Nestlé, Mars and so on.

"They need stability and continuity of supply, but if the New Zealand venison companies can deliver that, it has the potential to have a very positive effect on farm gate returns, year round."

John Sadler, Mountain River Venison's marketing director, also sees the trend as a positive. But he adds that it is a "disruptor" that makes planning more challenging. Like others in the industry, he is conscious that the petfood supply market is cyclical and that the current high prices are likely to ease at some stage.

Hickey agrees, saying prices for all components of the carcass are quite "tippy" at the moment, and he, along with others, expects to see the more familiar price cycle return, albeit at a



Every scrap of meat left on these bones is being snapped up by the petfood industry.

continued on page 10

Pampered pets: continued

higher level. Duncan says that come November 2018 when new contracts will kick in, “these petfood prices might just hold, rather than increase again. In that scenario we could see a slight easing of the schedule post the chilled season, but from the higher starting point.”

The demand for raw material to make petfood is, for now at least, adding significant value to each carcass. About 30 percent of carcass weight is made up by the bones, so a lift in price makes a noticeable impact on overall carcass value. Currently, the bones are said to contribute about \$80 to the value of each carcass.

Peter Mitchell, founder/director of Bay of Plenty petfood manufacturer Ziwi Ltd, says a “back of the fag packet” calculation shows that bones and offal combined contribute about \$100 to the value of each animal processed. “In terms of the schedule, these contribute about \$2 per kg.” His company sources MDM and offal from several processors and estimates they use about 1,000

tonnes a year from the deer industry. “The deer carcass is getting well picked over now.”

In addition to the MDM, as well as offal, petfood manufacturers are also buying venison trim and here they are in direct competition with human consumers. Andy Duncan says customers for higher-priced trim for human consumption can still source product, but petfood is outcompeting in the market for lower-priced trim.

Because relatively modest amounts of venison are used in some formulations (for example, Hill’s d/d™ prescription diet includes venison with potato starch), the products are not overly sensitive to price fluctuations. That’s not always the case, however.

Ziwi Ltd makes a premium air-dried venison product for dogs that includes a blend of meat and offal that is designed to closely mirror what would be eaten if a deer was killed and eaten by dogs in the wild. That high venison content is reflected in the price, but premium customers are not daunted (see sidebar).

So what does this all mean for the future. DINZ CEO Dan Coup sums it up:

“This petfood phenomenon has changed the shape of the venison schedule this season, but we expect to see a return to a more traditional schedule curve. While the spring price premium is expected to return, future seasonal peaks and troughs are likely to be less pronounced than they have been – thanks to the great market diversification work that our companies are doing.

“The deer industry views the demand from the premium petfood sector as a positive development that they expect to continue – albeit at an unknown price level.

“It’s a new segment and we don’t know if venison petfood is here to stay. With so many petfood companies having invested in product development and marketing, it won’t disappear overnight, but we will have to wait and see whether consumer demand and pricing levels are sustainable in the long term.” ■



Hill’s makes specialist petfoods including venison for animals with skin or food sensitivities.

Why pets rule

THE PLACE OF pets in the world has changed. “Fur babies” are pampered and treated as never before. No longer are dogs exiled to a drafty kennel and cats kicked out at night. These companion animals are treated as a royal branch of the family and create a lucrative living for those who keep them groomed, happy and healthy.

Veterinarians, pet groomers, pet nail bars, dog walkers, pet gadget makers and especially petfood manufacturers are doing very nicely thank you and the trend is showing no sign of abating.

The global pet care market was projected to reach sales of US\$110 billion in 2017¹, with about \$75 billion accounted for by petfood.

In the United States, cat ownership has levelled off, but dog ownership has grown 29

percent in the past decade². While baby boomers prefer large dogs, millennials are keener on small dogs – and because the diminutive dog eats less, well-off owners are more inclined to spend extra on the food they buy for them.

Ziwi Peak Daily-Dog Air Dried Venison Cuisine, for example, currently sells in New Zealand for \$189.99 for a 2.5 kg bag, which



Specialist petfoods are formulated to resemble dogs’ ancestral diets. Illustration: Rory Stewart

works out at about \$6.33/day for a 5kg dog. Peter Mitchell of Ziwi Ltd explains that because the company has created a shelf stable alternative to a raw meat and organ (wild prey) diet by removing 66 percent (water) of the weight, serving sizes are small, offering very dense nutrition. The air-dried product has no fillers (grains or potato), preservatives or sugars, he adds.

Ninety-five percent of the company's output is exported.

The boom in pet ownership isn't confined to the west. Alastair Kendon of Pasture Petfoods says pet ownership in Asia is growing fast, with the pet population in China set to surpass that in the United States.

Petfood manufacturers are tapping into people's concerns about good nutrition. Top-end products include photos on the packaging of ingredients and dishes that wouldn't look out of place on your dining table, while companies like Hill's provide a comprehensive

range of feeds prescribed to treat particular conditions.

But why the focus on venison? It turns out a good number of pets suffer allergies from eating other protein sources such as beef or chicken, so venison is an ideal hypoallergenic alternative. Beyond that, there is growing interest in more "natural" paleo-type diets, not only for humans but also for their pets. Deer and their venison fit that narrative very well as part of the ancestral diet of dogs.

Peter Mitchell says pet owners are far more discerning now. "They are real label readers. They want petfood that is antibiotic and hormone free, from grass-fed, naturally raised animals." ■

1. Source: <https://blog.euromonitor.com/2017/09/state-global-pet-care-trends.html>
2. Source: <http://bit.ly/2tVSJtw>

Brothers have carved successful careers



Peter Mitchell and friends.

TWINS PETER AND Mark Mitchell have both been involved with the deer industry since the late 1970s, when in their late teens they set up a small deer farm at Alexandra in Otago. Some of the stock was live-captured in Fiordland. They relocated to the Bay of Plenty in the early 1980s, buying a farm and investing in the Summit Venison plant, a farmer cooperative.

The brothers then bought a nearby butcher's shop and started a smallgoods business making venison sausages for the domestic market. In 1988 they started to forge their own paths, when Mark established Broadleaf in California. That company (see separate article in this issue), has since gone on to great success, importing and distributing a wide range of high-end meat products from New Zealand.

While Mark has focused on high-value deer products for the past 30 years, Peter jokes that he has become the "bottom feeder". But he's proven that it's possible to make a very successful business adding value to the lesser parts of the animal.

In 2002, Peter and wife Kimberly started developing petfood products and after getting their range and branding perfected, launched the Ziwi Peak range in 2005. It's gone from strength to strength, with turnover currently growing at 35 percent a year. The brand values are strongly rooted in New Zealand's clean environment with its sustainable, humane and safe farming practices. They use a variety of animal proteins as well as green-lipped mussels and kelp, all of which support the New Zealand product narrative.

Peter says the Summit Venison plant gave Mark and him a great launching pad for their respective careers, but ultimately the facility's age, small capacity and environmental compliance costs meant it was no longer viable. The deer products Ziwi uses originate with several of New Zealand's major venison processors.

Where venison makes up a fairly small proportion of a petfood product, Peter says the recent price increases for MDM and offal haven't had too great an impact. But their air-dried venison product, where the weight is reduced to about one-third by drying, is much more sensitive to the spike in raw material prices. But for pet owners who want only the best, price is no barrier. ■



Mark Mitchell speaking at the 2016 Deer Industry Conference in Dunedin.

Broadleaf customers experience NZ story first hand

If you ever wanted to understand the value of enduring relationships, persistence and a great story, it would be hard to go past the experience of Mark Mitchell and the company he started in the United States 30 years ago, Broadleaf. *Deer Industry News* Editor, **Phil Stewart**, caught up with Mark Mitchell and his guests last month when he was in New Zealand with a group of eight key US Cervena® venison customers.



Dropping in to Wellington during their visit are, from left: Debbie Rocker (Rocker Brothers, California), Maggie Healey (TF Kinneale, Boston), Ron Villarreal (Sales and Inventory Manager, Broadleaf), Erik Oosterwijk (Fells Point Meats, Baltimore), Mark Mitchell (President, Broadleaf), Patrick Tillman (Spacex, Los Angeles), Kyle Pesesky (Colorado Box Beef Lakeland, Florida), Michael Gau (Middendorf, Missouri), Chase Carter (Martin Preferred Meat, Houston Texas) and Gary Zick (Zicks Meats, Michigan). The group was joined in the evening by DINZ Chair Ian Walker and P2P Manager Innes Moffat.

THE TOUR WAS a joint initiative between Broadleaf, Duncan New Zealand, and Pāmu Farms, with funding and assistance from DINZ. The eight distributors were chosen from Broadleaf’s 400 US customers and were from right across the continent – from the Spacex centre in California to Boston and Baltimore in the east.

Broadleaf and Duncan New Zealand have been working closely for the past 18 years, with Landcorp (now Pāmu) an important supplier of venison through Duncan to the United States.

The itinerary immersed the group in the New Zealand venison story, including visits to the Pāmu Farms Rangitaiki Station and Thornicroft Deer Farm as well as Angus Pure and lamb suppliers, Duncan NZ’s processing plant at Mosgiel, with some of the country’s best fine dining and recreation enjoyed along the way.

A few days into the visit, it was clear the group were already captivated by the hospitality and what they were seeing. Mitchell said it was important that customers could see our farming systems up close and share the experience with their own sales teams and the restaurants that served our products.

“It’s been phenomenal. The animals are in great shape, stags are in the roar and there is plenty of grass going into winter. The reception we’ve had so far has been first class.”

Positive impressions

Kyle Pesesky, from Colorado Box Beef Lakeland in Florida, said he was struck by the contrast between New Zealand’s grass-fed systems and the feedlots prevalent in the United States. “Rangitaiki Station was one of the most interesting places I’ve seen. We usually just see the end result, so it’s great to see where it comes from. Our consumers want cage-free, grass-fed products, with no hormones or GMOs and they are happy to pay more for it. You can taste the difference too!”

Chase Carter, of Martin Preferred Meat in Texas was another of the eight customers on the tour. He said customers are constantly

asking about their products, and the visit helped them provide the back story. The urge to “buy local” was not as important as the forging of a connection with the farms that produced the venison, wherever that might be. He said customers were also constantly looking for novel cuts and cost-effective options.

Growing trade

Mark Mitchell said the volume of venison imported from New Zealand has been growing, reflecting the United States eclipsing Germany as our biggest single market. Duncan New Zealand is their primary supplier for direct exports, but if there is a shortfall at any stage, they work together to find an alternative source.

Most product arrives by sea, with airfreight being used only where there is a supply pinch.

“Middle cuts have always been our strong point but leg cuts have been more of an Achilles heel and after this trip we’re going to look at how we can get more volume out of the legs.”

Lean trim is another important component in the United States for items like grass-fed burgers and for sausage makers, he added.

Supply pressures

Mitchell said he understands the seasonal supply pressures, with the New Zealand winter months being the tightest – especially in recent years as kill numbers have fallen. “We always have some safety stock on hand, so we can supply frozen if there is no chilled.” About 80–85 percent of the venison middles they handle is chilled. Chilled stock can be frozen in plenty of time if necessary to help fill a shortfall later.

Mitchell said having a good relationship with his New Zealand suppliers meant it was possible to negotiate for some livestock to be held through until winter to help cover the seasonal shortages. “They would need to be rewarded for that.”

Duncan New Zealand’s Glenn Tyrrell, who was accompanying the tour, said the link with Pāmu Farms was vital in helping plug the supply gaps as well as giving these customers a real sense of where their venison comes from. Mitchell added that Duncan having plants in both Islands gave them more options as well.

The Cervena appellation had always been very important, Mitchell said. “It set the bar high and it’s something that chefs look for. They know the quality and consistency will always be there. In a busy kitchen that is one less hassle.”

He said there was a crop of new young chefs who could access information quickly, and they were keen to buy into the grass-fed, hormone-free narrative, which made our story attractive.

Chef education required a continuous effort, however, and Mitchell had high praise for DINZ, its US representative Nigel Morris and Executive Chef Graham Brown for their work in this regard. “They do a phenomenal job – they’re always well received.”

Selling points

Chase Carter said New Zealand’s GMO-free status provided another strong selling point and Mitchell said that it added to our natural story.

Patrick Tilman, who plans the restaurant catering at California tech company SpaceX, said there was a strong hunger for variety, so venison fitted in well there. “My executive chef has a strong wild game background; he introduced farmed venison to me early and taught me how to make it appealing. The fact that it’s traceable and [ethically] farmed also makes it an easier sell than something like pork or chicken. This trip to New Zealand has provided us with a really strong story to tell for the more educated customers we have. More people are cooking at home and looking for those more exotic cuts that you can’t get from your local grocery.”

The strong hunting culture in parts of the US during the autumn did not affect customers’ attitudes towards venison – for good or bad. Gary Zick of Zicks Meats in Michigan said he receives steady

demand for venison from across the country.

Logistics in such a geographically large market has been the key to Broadleaf’s success, Mitchell said. “We have to deliver cost effectively or the sale won’t happen. We have our own logistics department including our own trucks for the local market.” He said US companies like Dot Logistics charged by the pound shipped, regardless of box size. “From our point of view that’s fantastic.”

Industry changes

Reflecting on the changes in the New Zealand deer industry over the past 30 years, Mitchell said small deer farms were still economic in the early days, but not so much now. He’s noticed the larger enterprises getting bigger and more of a weighting towards the South Island, a “mainstay of venison”.

“It would be nice to see deer coming back to those farms where you see dairy cows behind deer fencing. We’re here to grow the market [for deer].”

Looking ahead, Mitchell said the opportunities for New Zealand deer products lay in the people, the relationships and the story. “Our guests on this tour are now well versed in the product, from weaning right through to processing. They’re already thinking about where they can place the product with their own customers and talking about opportunities they may have been missing.”

The Broadleaf story

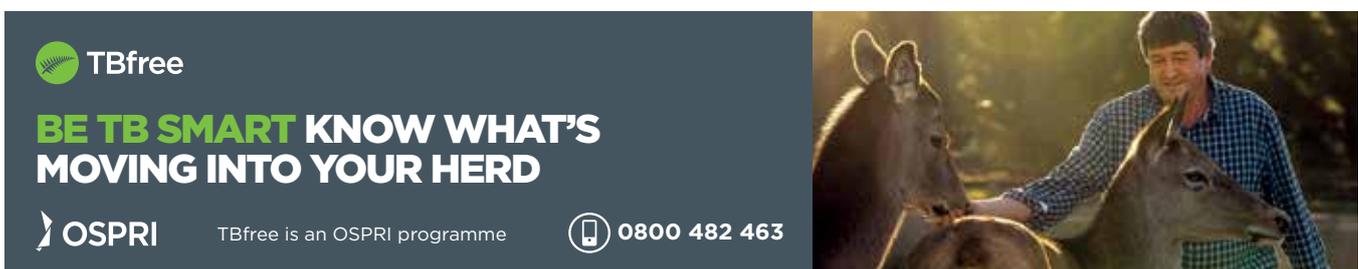
Mark Mitchell and his wife Annie founded meat import and distribution business Broadleaf in Los Angeles in 1988. (The name is for the Broadleaf tree that featured in the deer traps Mark and his brother Peter built in Fiordland in the late 1970s as they set up their first deer farming enterprise together.)

The initial focus was New Zealand venison and this remains an important component of Broadleaf’s business. The company is the largest importer and distributor of New Zealand venison in the United States, currently accounting for 700–800 tonnes of venison a year. This is a combination of high-value and manufacturing grade cuts.

As the business has grown, so has the range of proteins on offer, now including Wagyu beef, Angus Pure beef, lamb, buffalo, Berkshire pork among others – but venison remains an important part of the business.

Broadleaf is based at Vernon, just outside Los Angeles with 80 staff, where the 5,200 square-metre facility has its own cut shop and grinding operation, FedEx department and USDA handling on site. The site includes storage for both frozen and chilled product, with devanning (unloading) of containers done on-site, allowing continuous temperature control.

Another facility in Texas employs a further 50. ■



TBfree
BE TB SMART KNOW WHAT'S MOVING INTO YOUR HERD
OSPRI TBfree is an OSPRI programme 0800 482 463

Plugging P: Detainment Bunds offer promise

by Phil Stewart, *Deer Industry News* Editor

No matter how well your waterways are fenced and planted, a short and intense burst of rain can overwhelm the environmental defences and carry unacceptably high loads of sediment and phosphorus (P) downstream in surface runoff. Especially designed Detainment Bunds (DBs) could offer an effective way to trap most of this on the farm before the water is released to continue its journey off your property.



Detainment bund two hours after a 100mm downpour. Photo courtesy of Charlotte Adair.

JOHN PATERSON, FORMER DFA branch chair and lead project manager of the original NZ Deer Farmers' Landcare Manual, is leading an initiative in the Lake Rotorua catchment to assess the effectiveness of DBs as a way to trap P and suspended sediments as well as nitrate-N and ammonium. Initiated in 2016, first trial results on a farm in the catchment have been very encouraging.

The \$409,000, Phosphate Mitigation Project (PMP)¹ funded by multiple partners has three intensively monitored field trial sites that will generate over 60 data sets over three years.

In the initial results (Levine et al, 2018), loadings were reduced as follows, courtesy of the DB:

- Dissolved reactive P: -81%
- Suspended sediments: -90%
- Nitrate-N and ammonium, -85% and -80% respectively

Masters student Dylan Clark worked on the initial qualitative assessment in 2012. The PMP partners are funding Brian Levine, a current PhD candidate at Massey University, to document and quantify the performance of the DBs.

Paterson says the 22 DBs now built show promise for helping mitigate runoff losses during heavy rain events – something that may become more common with the greater extremes of climate change.

DairyNZ is a strong supporter of the research, and is also funding additional work on developing a GIS LiDAR model to fast-track locating best DB sites on farms. Beef + LambNZ is also on board and with deer more implicated in sediment and P losses in runoff, the project also offers potential to this industry. NIWA is also a partner, providing the complex array of instruments needed.

A Detainment Bund is a low earthen mound built across a storm water flow path with an outlet culvert at the base and a vertical riser that allows water to be “skimmed” from the surface after the pond fills during heavy rain (see diagram). Water builds up to the top of the riser and is allowed to stay put for up to three days before the small drain hole at the base of the riser is opened and water allowed to flow out through the culvert under the bund. The three days allows the sediments to settle, while pasture can

¹ The PMP is jointly funded by The Sustainable Farming Fund, DairyNZ, Bay of Plenty Regional Council, Ballance Agri-Nutrients, Environment Canterbury, Beef + Lamb NZ, Deer Industry New Zealand, Waikato Regional Council. Science Institutions; Massey University (PhD Host), Lincoln University, NIWA, Waikato University, AgResearch.

recover after up to three days' immersion. The design also allows for an overflow spillway on the crest of the bund, in case a storm overwhelms its ponding capacity. The optimal minimum pond size to catchment ratio is 120m³/hectare. Paddocks with permanent waterways are not generally suitable for DBs, although it is possible to build one over a stream.

Paterson says the free-draining soils in the Rotorua catchment mean that stock can be reintroduced fairly quickly after a bund is drained, but it might take longer in other areas with heavier, less porous soils. He says deer would need to be kept out of the paddocks altogether when a bund was in use or drying out, to prevent them making mischief with any of the surface water or damp areas.

One positive spinoff for farms using DBs is that nutrients are retained on the farms pasture. Paterson says it's unclear how much dissolved P might leave the bund when drained, but one possibility to remove it before water release could be the use of a flocculant – probably polyacrylamide, which is also used to treat waste water.

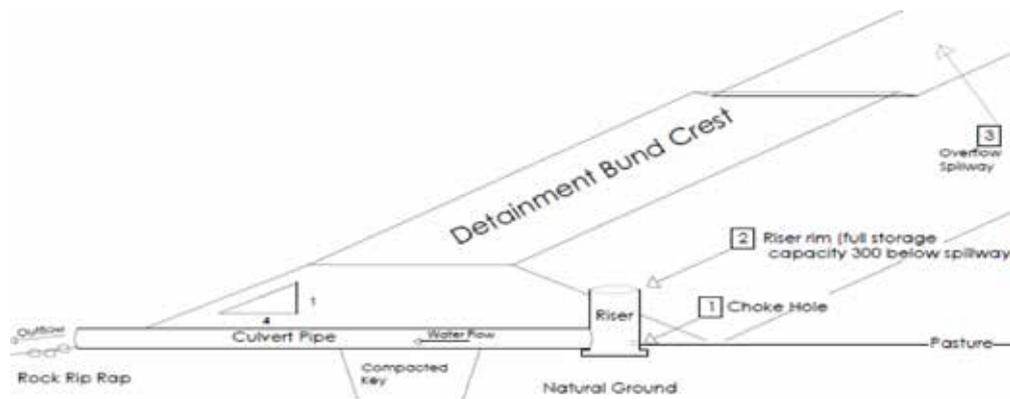
As the DB is used repeatedly, sediments and nutrients are likely to accumulate, but Paterson says that if this happens too fast, that could be saying something about environmental practices on the rest of the farm. A bund on a well-managed farm “could last 50–100 years before they need any mining out, and that material would be a valuable resource in itself,” he says.

He says wetlands and detainment bunds serve different functions but can be built in tandem to complement each other. Wetlands are good for removing N, but can't cope with heavy sediment loadings flowing through, so if particles are retained by a DB, the outflow could then safely run through a wetland to help remove N. Paterson notes that wetlands are expensive to build compared with DBs. “It is best to remove the sediment first in a linked DB upstream, to get the best lifespan out of your investment in a wetland.”

Once the research is complete and the impacts of DBs has been properly quantified, Paterson says their contribution could be factored into the OVERSEER model. This will enable the potential for nutrient capture credit and payback for the DB owner/farmer in regions where regulatory nutrient limits on farming are becoming a reality.

He is hoping funding can be found to extend the PMP to include assessment of DBs' ability to mitigate outflow of *E. coli*.

If DBs prove their value in mitigating nutrient and sediment



Detainment bund design. Diagram courtesy of John Paterson.

losses on the land types in the current study, several factors will determine their value to deer farms, including paddock configuration, topography, soil type and stock management system. However Paterson says they could be more widely usable than you'd think. “We've just done a feasibility exercise on a steep 400-hectare farm and even on that place, the runoff from 65 percent of it could be captured.” He says GIS LiDAR technology is an important tool for scoping a farm for likely sites with the best storage-to-catchment ratios.

The Bay of Plenty Regional Council currently funds up to 50 percent of the cost of DBs, regarding them as a credible extension of the riparian protection programme (which the council also funds up to 50 percent for riparian protection fencing and planting). “Ideally in the future, DBs will achieve the same status as riparian funding programmes with other councils as well,” Paterson says.

The cost of a bund is variable. Paterson says some farms already have raised lanes and races that could serve as bunds by fitting a riser to the existing culvert that passes underneath, costing \$1000 at most. Otherwise, earthworks can usually be done for around \$10,000–\$15,000. “I did an 80-metre long one last year for just over \$20,000,” he says.

Generally a DB can be built without a resource consent, as long as they fall within “permitted activity” status. For the Bay of Plenty that is a height of 2.5m, but that height will vary within other council regions.

Reference

Levine B, Paterson J, Burkitt L, Tanner C (2018) *Phosphorus Mitigation Project: Preliminary data investigating nutrient attenuation using detainment bunds in the Lake Rotorua catchment*; New Zealand Land Treatment Collective conference proceedings. ■

DEER HUSBANDRY COURSES STARTING SOON

Locations: **South Canterbury, Southland and Taupo**

Start dates: **June/July**

Email rachael.handy@primaryito.ac.nz for more information.

0800208020 | primaryito.ac.nz



Parasite research: No more shots in the dark?

by Phil Stewart, *Deer Industry News* Editor

When a lot of weaners started dying from lungworm two or three years ago, Dave Leathwick asked a simple question: what was the source of this infection upsurge? No-one could tell him.

That was a lightbulb moment for the AgResearch parasitologist. As someone who confesses to not much of a background in deer parasites, Leathwick is unafraid to ask the difficult questions and this one was a sitter. How are we expected to effectively manage parasites in deer if we don't know how they interact with their hosts?

It's work that probably should have been started decades ago, but as the deer industry developed and deer parasites got on board, parasite control techniques used for sheep and cattle were simply adapted for deer. And with wildly differing approaches to parasite control within deer farming regions, it's apparent that the industry has been taking shots in the dark for too long.

In the past few years, it has become increasingly obvious that the seasonal biology of *Ostertagia* species and lungworm (*Dictyoacaulus eckerti*) infections in deer needs to be properly understood if effective parasite control programmes are to be developed. A growing appreciation of the handbrake effect of parasites on deer productivity has been another powerful motivator for the research.

A two-year research programme, *Understanding the life-cycles of lungworm and gastrointestinal parasites in deer*, should provide some of this much-needed baseline information. The work is being funded under DEEResearch's Hitting Targets programme undertaken by AgResearch.

Post-doctoral researcher Alex Chambers has travelled here to for this study from Anglesey (North Wales) in the United Kingdom where she has completed work for a PhD at the University of Edinburgh. She studied the role of parasites in the population dynamics of the tiny Soay sheep at St. Kilda, an archipelago in Scotland's Outer Hebrides.

Working under Leathwick's supervision, Chambers is analysing

faecal samples taken regularly from a range of farm environments (ideally fortnightly for weaners and every 3 or 4 weeks for adult deer). Samples are being analysed for egg (gastrointestinal parasites) and larval (lungworm) counts, with the parasites then being speciated.

Chambers says the programme design includes a good spread of



Alex Chambers preparing larval cultures in the laboratory.

Benchmarked production and Johne's disease info on your deer

Season	Carcass weight (young deer)
2013	52
2014	53
2015	55
2016	51
2017	60

Deer PRO

To help make and assess your deer management decisions contact **DeerPRO** for your report – **0800 456 453** or **info@deerpro.org.nz**

typical deer farming environments and includes reds, red-wapiti cross and wapiti. Young stock (2–12 months), mixed age hinds and mixed age stags are being sampled.

An important aspect of the work will be to get a better fix on seasonal patterns of infection and excretion of internal parasite eggs and larvae. It's thought that the reproductive cycles of the parasites may have evolved to be in synchrony with the highly seasonal patterns of deer reproduction and growth. The focus of this research is to understand the sources of contamination of pasture and when deer are getting challenged by worm larvae at a critical time of the year.

Also being monitored is the relationship between weather conditions – temperature and moisture – and parasite population dynamics on pasture.

Leathwick says one area for investigation will be the post-partum period in hinds. “There is a post-partum increase in parasite burdens in sheep, but not cattle, so it will be interesting to see what happens in deer.”

He has high praise for the deer farmers who have agreed to host the study and provide the samples. With such regular sampling required, it could be disruptive, but Leathwick says deer farmers are highly motivated to contribute to the sum of knowledge on parasites.

Five properties are providing the necessary field samples and environmental data: Landcorp Rangitaiki (central North Island), Karen Middelberg, Jedburgh Farm, (Central Hawke's Bay), Landcorp Mararoa (Te Anau Basin), Duncan and Lorna Humm (mid Canterbury) and AgResearch Invermay (Otago).

With about 150 samples from adult deer to be processed every 3 to 4 weeks, Chambers has plenty to keep her busy. She has visited all five contributing farms to explain the aims and methods with the people concerned and the samples are now flowing in, sent by courier in special packs.

She says each submission includes a form for the capture of crucial information including whether the animals have been drenched and whether animals have been moved or doing any cross grazing with sheep or cattle. All of the properties have weather stations, so collecting data on temperature and moisture conditions when samples were gathered should be relatively straightforward.

Chambers says counting lungworm larvae in incoming samples takes priority as these deteriorate quickly. She is getting used

to seeing very low faecal egg counts at times – something that doesn't always correlate closely to worm burdens in deer. The faecal egg counts are followed by culturing so that the different gastrointestinal parasite species can be identified. This work will be done the good old-fashioned way by looking at the morphology (tail length in this case) of the cultured gastrointestinal larvae through a microscope. However, it's hoped a DNA sequencing method using illumina PCR will speed up the process considerably if it can be validated for deer parasites. The morphology work will continue, however.

The research is both qualitative and quantitative, identifying what parasites are present, and at what levels. The relationship between field conditions (temperature and moisture) and parasite population changes will be monitored, but this will also be investigated in the laboratory to see more precisely how the parasite species respond to fluctuations in environmental conditions. In the field, grazing patterns and drench use will be among the other factors investigated.

Leathwick says the data collected on the free-living stages of deer parasites over the two years (there is allowance for a further year if needed) will be combined to build models of parasite development on pasture in different parts of the country. From this, drenching programmes will be able to be designed, targeting specific parasites in different regions.

Given the current paucity of knowledge about deer-parasite interaction on New Zealand farms, Leathwick says “whatever we find, it will be great. We won't get any wrong answers – just answers.” ■

Rising Stars results: Correction

There was an error in the Rising Stars results booklet in Class 10 – National 2 Year Old Elk/Wapiti Velvet. Some details for the 4th-placed entry by **Longridge** were omitted and are:

Breeder: Max Winders; **Stag name:** Max T14; **Age:** 2; **Sire:** Silverstream.

These details have been corrected in the online version of the results.

The organisers of Rising Stars apologise for the error.



HYUN DAE DEER PRODUCTS LTD
9 Druces Road, Manukau, Auckland Ph:(09) 263-7720
WWW.HYUNDAEDEER.CO.NZ

-Licensed Exporter -Mpi Approved Processing facility



Sliced Top



Sliced Jelly Tip



Processing



Processing



Export

Adaptable venison overcoming chef ‘saddle of the brain’

by Tim Fulton, *Deer Industry News* writer

Venison’s versatility and international reach was on show when Mountain River Venison brought together its biggest supply and sales partners to Dunsandel, Mid Canterbury on 23 February.

SWEDISH IMPORT PARTNER Gustaf Kugelberg said he was using ready-to-serve, branded “Pasture Venison”. Kugelberg, who has a long association with the New Zealand deer industry, came here last year to develop new cuts using the whole body rather than just loin and tenderloin.

Venison could be expensive so it made sense to prepare and deliver product to food service “completely clean”, ready to serve, he said. Another Swedish partner, Henning Kvick from foodservice distributor Menigo AB, was introducing chefs to New Zealand venison through a new restaurant academy.

He worked with DINZ executive chef Graham Brown to create a “cross-pollination of chefs learning to prepare difficult cuts and dishes”. The aim was to counter a “saddle of the brain” condition that convinced chefs that only middle cuts will deliver on a marketer’s promise. “New Zealand farmers and chefs know otherwise with venison.”

Angus Cleland from Mountain River’s US partner Terra Pacific Marketing worked with smaller, independent distributors, having found they did a better than huge “broadline” foodservice companies that stocked a galaxy of products from mops to meat.

Hospitality had a rule-of-thumb estimate that 80 percent of undecided diners took a table-side server’s recommendation.

Up to 75 percent of Terra Pacific’s venison went to restaurants, so story-telling was a “critical part of what we do”, Cleland told about 140 Mountain River guests at Dunsandel Community Centre.

“We need to get the story out all the way through that chain to the table-side server.”

The US “meat snack” category has expanded rapidly into the “exotic” meats, like bison and venison in meat bars, bites and jerky. Consumers were looking for lean, healthy high-protein



Enjoying a quick tour around Northbank Station are, from left: Nigel Morris, Deer Industry New Zealand representative (United States); Michel Gasser, Skin Packaging (Switzerland); Jacques Beyeler, senior manager of import partner Casic (Switzerland); Angus Cleland, owner and manager of import partner Terra Pacific Marketing (United States); Hunter McGregor, director of import partner Shanghai Rata (China); Steve Hauff, owner of foodservice distributor Prairie Harvest (United States); Wayne Allan, farm consultant and DINZ Advance Party facilitator (Canterbury); Adam Waite, Northbank Station manager.

snacks – and these were particularly sought after by the “paleo diet” crowd. Small “upstart” artisan producers of these products had been rapidly acquired by multi-nationals who recognised the value of the category. Hershey bought Krave Jerky in 2015 and more recently General Mills acquired protein bar manufacturer Epic, for example.

The value-added leg cuts such as heart of rump and tri-tip were gaining more traction as chefs recognise their convenience, high yield and consistency, Cleland said.

Distributing in the United States, Canada and Mexico, Terra Pacific was working on a range of snack food and taking stock of the growing home delivery market, typified by \$9–\$10 meal ingredient packages. The company was also exploring the potential for high-value pet food sales.

The American pet food industry had never been a bigger factor in the business, Cleland said. “It’s put us under a lot of supply pressure given that the pet food trade can pay more for trim than the food trade,” he said.

Hawke’s Bay Pasture Petfoods general manager Alastair Kendon was given a “bad boy in the room” introduction but stepped up to talk about his influential industry. Kendon said more young couples were choosing to have pets or “companions” rather than children. In the United States, a discerning diner might feed their pet a fillet mignon at a pet-friendly restaurant while in China, couples living with their parents in apartments might buy a pet to



Gustaf Kugelberg (left) director of import partner Mountain River AB, with Henning Kvick, sales manager at foodservice distributor Menigo AB.

continued on page 19

Velvet update

Velvet exports hit a new record

RECORD VELVET EXPORTS have been achieved over the 2017/18 season. According to Statistics NZ, velvet exports reached NZ\$75m for the year ending February 2018 (Figure 1). Some of this will be due to the significant increase in early export activity for this season compared with previous years, skewing the data somewhat. However, all export data scenarios provide evidence that the industry continues the strong growth trend experienced over the past seven years.

Annual velvet exports to China hit NZ\$50m – a similar figure to venison exports to the United States (NZ\$47m) and Germany (NZ\$46m). However, processors in China claim that around half the New Zealand velvet imports are processed and re-exported to Korea.

Sales of KGC's hero velvet brand continues to soar

Korea Ginseng Corporation (KGC) announced it has reached 100 billion Korean Won (NZ\$130m) sales of the Cheon Nok brand since its launch in December 2014. The marketing of Cheon Nok heavily promotes New Zealand velvet as a key ingredient. KGC is now positioning Cheon Nok as the world's leading velvet brand and will be running a small-scale point-of-sale campaign celebrating this success at its 1,000 retail outlets in Korea (see right).

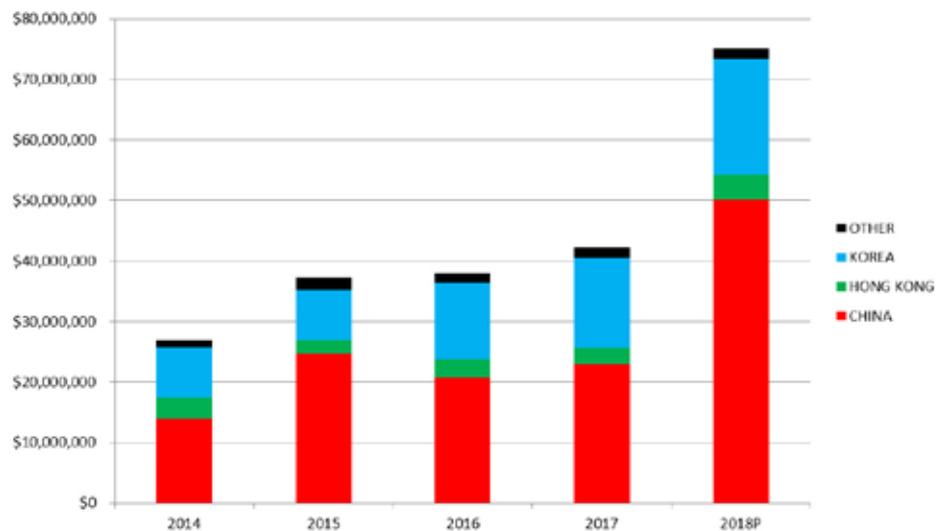


Figure 1: Value and destination of New Zealand velvet exports 2014–2018.

Adaptable venison: continued

keep their loved ones company.

At the moment, venison could be a named pet food ingredient at just 3 percent of the mix. Regulatory changes may soon make the labelling stricter, more like for infant formula, so demand for mechanically deboned venison may have peaked, Kendon said. “Pet food production may have reached its peak price; it’s liable to be subject to a correction,” he said. (See page 7 for more on this.)

Steve Hauff from American foodservice distributor, Prairie Harvest Speciality Foods, is based in the Black Hills of South Dakota. Two-thirds of the company’s sales were game products like venison, wapiti, duck, dry-aged beef, buffalo and pheasant. “We also sell more rattlesnake than anyone else in the world,” the Sioux Hills resident said.

Hauff said his guiding principle was “I’ll do anything the chefs want.” At the moment the food movement was “like Roman times” with demand for 40 ounce T-bone steaks and generally big meals.

Swiss import partner, Jacques Beyeler, secures game meat, seafood and chicken for the CASIC co-operative. Five years he ago he and John Sadler started delivering a continuous supply of air-freighted wapiti venison, proving year-round supply was possible.

In China, Kiwi Hunter McGregor started importing and

distributing venison two years ago.

As Shanghai Rata Trading, McGregor distributed “off a very small base”. The company sold New Zealand meat directly to major five-star hotels and high-end restaurants all over the country and retail food products via online and offline channels.

One of his best sellers was venison ribs as Chinese loved eating meat from the bone – especially in 40°C summer conditions in Shanghai – and shanks did well in winter.

But it was a slog even bringing Kiwi venison into China, let alone getting entry clearance from ports and delivery to top-rated hotels on the Bund waterfront area in central Shanghai.

“We have sold to about 15 cities but most of them, clients in the cities, would only buy once every six to 12 months. So regular sales into most places are not happening or easy at this stage – five locations or cities buy regularly.”

There was headway within New Zealand, meanwhile, for Canterbury’s Merchant of Venison, now in its second year of a prized contract with the Lone Star restaurant chain. The original one-year contract for 29 outlets was hard-won, as the chain only changes its printed menu once a year, Merchant of Venison owner James Petrie said. ■

Venison update

Exports

- Total venison export volumes for the year ending January are slightly down (-5%) while value has increased by 10%, thanks to strong prices out of Europe and the United States. The value of co-products has increased significantly for the period (+35%), primarily venison meal to the United States.
- With large volume of manufacturing product redirected from Europe to the United States over the past year, the United States is now New Zealand's largest export market for venison by both volume (up 42% for the year to January) and value (+49%). While volumes dropped, the average value of venison exported to Germany increased by 4%. With a weak pound, exports to the United Kingdom dropped significantly (-25%).
- Chilled exports to the United States reduced sharply in the past year and increased into continental Europe as strong demand saw production directed back to the main European markets. Chilled exports to Netherlands and Germany increased, while most other markets have seen a decrease due to the reduction in the overall kill.

Market observations: United States

- The demand for manufacturing venison continues to have a strong influence over the North American market, both in terms of ground and manufactured products and the pet food market.
- Demand from the US pet food sector continues to be strong (see separate feature article on page 7). The view of several importers is that petfood should offer a stable market, with manufacturers opting to reduce the amount of venison used in a product if the price increases.
- Demand for middle and leg cuts remains firm from the restaurant sector.
- Some price-sensitive customers have moved away from venison in favour of cheaper alternative proteins such as grass-fed beef. There are more protein alternatives on the market than ever before.

Market observations: Europe

- Overall the mood of importers is positive, both in terms of the current

venison market conditions and the promotion initiatives supported by DINZ.

- Warm weather into December delayed consumption of game meats. The game season continues to contract, from mid-October to Christmas.
- Stocks are low entering 2018. All importers noted the high prices, although they seemed to have eased slightly from the end of 2017, and appear to be manageable for the moment. Importers are still noting strong demand.
- Some importers reported that the price of New Zealand venison legs and manufacturing product was above what some retail manufacturers were prepared to pay. Producers of frozen goulash and frozen leg steaks for the main German discounters passed by New Zealand venison this year.
- Importers are seeing venison being replaced on menus in favour of alternative and cheaper proteins. Several importers are concerned about the current low price of Argentinian beef and the competition this will create for chilled venison over the European summer.

Schedule

- The national average published schedule for AP stags (55–60kg) was \$10.77/kg gross in the week beginning 19 March. The published schedule in October was \$9.73. At \$10.77, the schedule in March is 54% above the 10-year average. ■

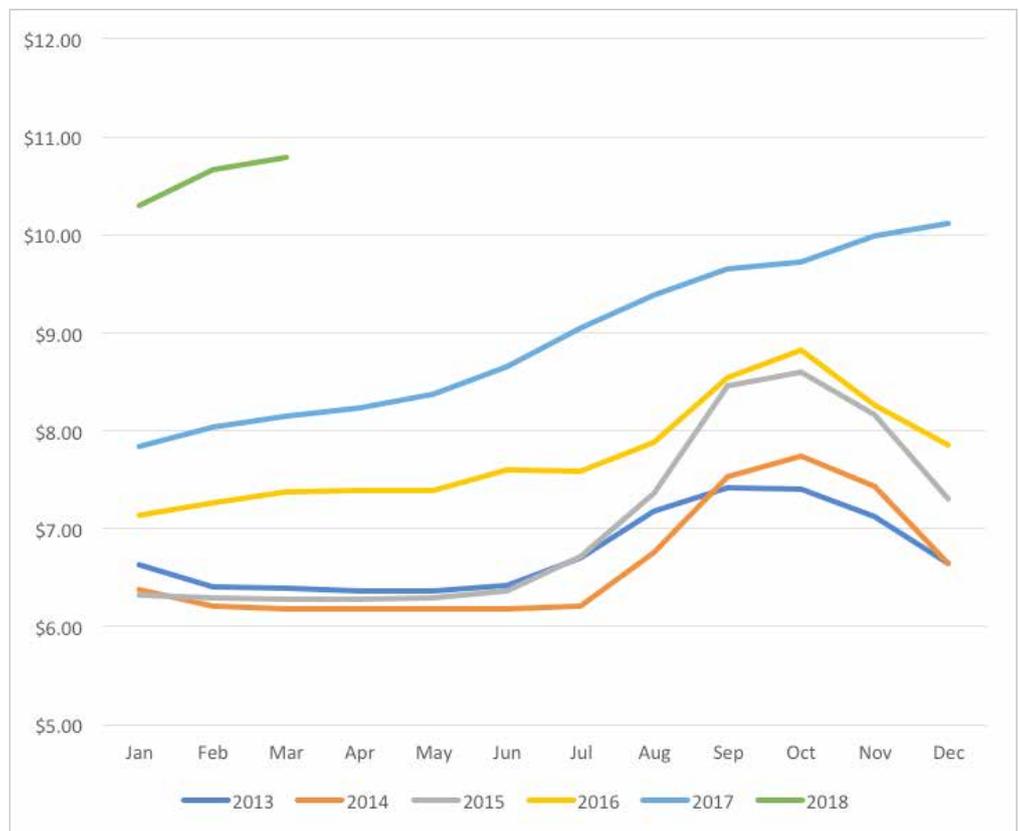


Figure 1: National published schedule: 2013–2018 AP Stag (\$/kg gross)