



**P2P**

## **PASSION2PROFIT**

**THE DEER INDUSTRY PROFITABILITY PROGRAMME**

**PRIMARY GROWTH PARTNERSHIP**

Programme complete – September 2022



**Deer Industry**  
New Zealand

**Ministry for Primary Industries**  
Manatū Ahu Matua









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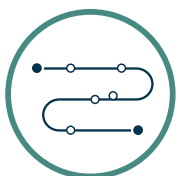
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## MARKETING PREMIUM VENISON CASE STUDIES

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## SUMMARY FACTS



### PROGRAMME LENGTH

7 years



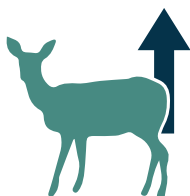
### TOTAL FUNDING SPENT

\$14,683,801



### DEER FACT SHEETS

53 sheets about best practice were distributed to all deer farmers



### DEER STATS

Average carcass weights lifted by 4 kg (up 7%) from 55 kg to 59 kg.

Fawn survival rates across the industry increased by 4%



### VENISON EXPORTS

2015: \$181 million

2021: \$155 million



### FARM ASSURANCE PROGRAMME

90% of eligible deer farmers have been certified, providing proof of the care and quality of the venison for discerning customers worldwide.





## STAG SELECTION

The proportion of deer breeders using eBVs for stag selection increased from 36% in 2011 to 49% in 2017.



Between 2018 and 2022, China's share of New Zealand venison exports quadrupled and there are good signs the growth will continue.



## FARMER GROUPS

The number of Advance Party practice change groups peaked at 29, directly involving up to 372 farmers at any one time.

Professionals facilitated 29 Advance Parties and 10 Deer Industry Environment Groups. This involvement helped build their deer expertise and the programme invested heavily in ongoing training and development.



## FARM PLANNING

From 2017 to 2022, the percentage of farmers with an FEP grew from 5% to 43%. A further 20% have identified and are taking actions on their environmental risks (CINTA survey, 2022).

However, the 2022 CINTA survey revealed that 70% of deer farmers had an animal health plan for their deer and, among people in APs or Environment Groups, the figure was 82%. This shows awareness of animal health planning has been boosted through this programme.

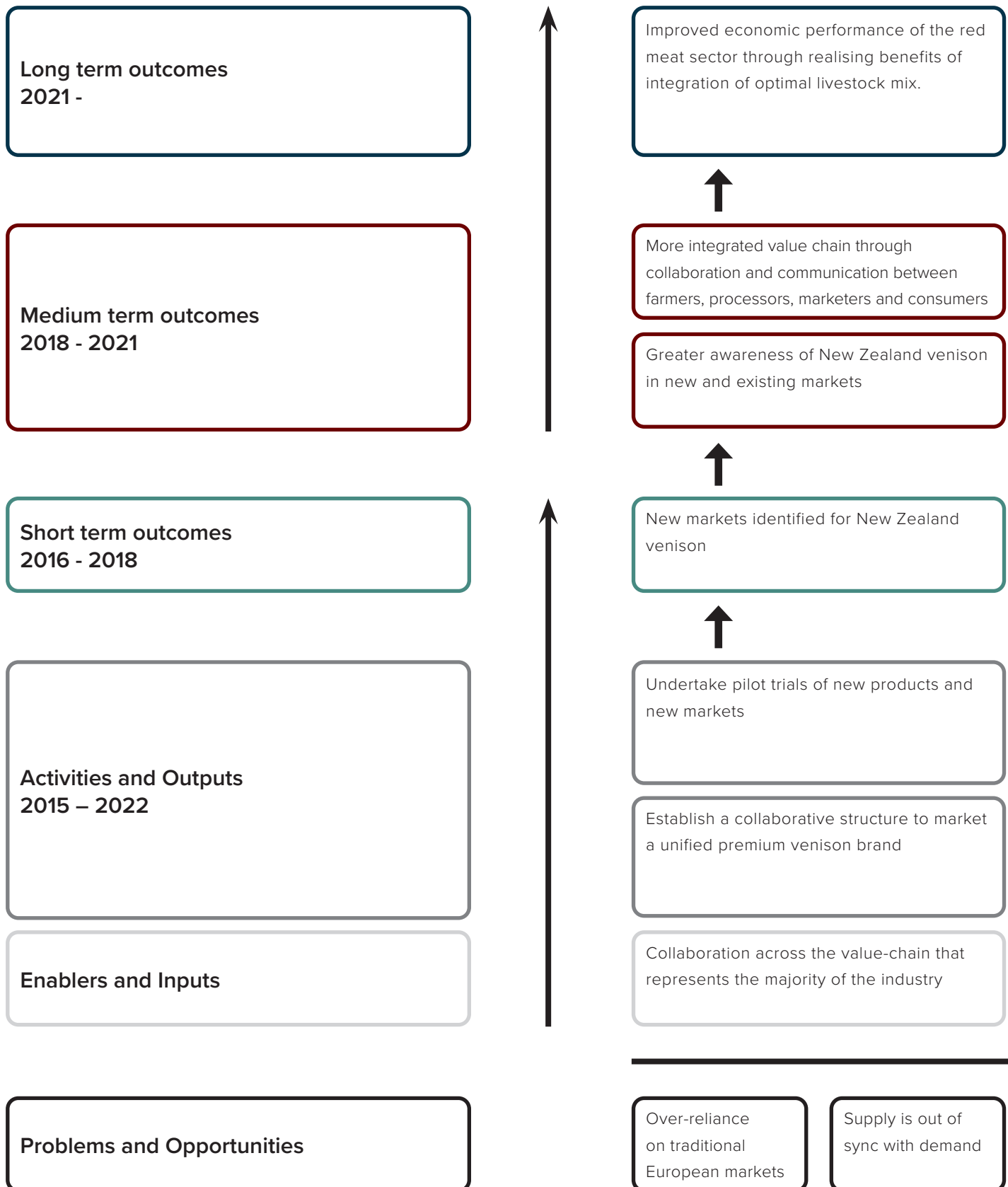


## NEW USA RETAIL SALES

2021: 5 companies involved selling + 320,000 retail packs



# OUTCOME LOGIC MODEL FOR PASSION2PROFIT PGP PROGRAMME



New markets developed for New Zealand venison, with the potential for this to be extended to the wider red meat sector and New Zealand primary industries

Improvements in animal health and welfare, and environmental stewardship as part of the Industry Agreed Standards

Enhanced reputation of New Zealand's primary industries through adoption of Industry Agreed Standards

### If successful, New Zealand will benefit through...

More consistent and increased demand for New Zealand venison

New markets developed for New Zealand venison

Improvements in venison productivity

Better informed and skilled industry

Increased participation in the premium venison brand

Increased uptake of technology and best practice by New Zealand venison producers

### If successful, New Zealand will benefit through...

Insights into what is demanded by consumers in existing and potential markets

Greater communication and collaborative learning across the industry

Easier access and increased uptake of new technology and processes

### If the activities of the programme are successful...

Develop and implement a set of Industry Agreed Standards for premium New Zealand venison

Use Advanced Parties and adaptation for extension and uptake

Establish access for venison producers to on-farm experts

Develop consumer demanded products

Conduct market research to identify consumer demand, potential new markets and what is expected of premium venison

Identify on-farm experts for genetics, animal health, feed and technology uptake

Package new genetic and production technology for easier access by venison producers

Entrepreneurial and innovative industry

Opportunities identified in Venison Industry Strategy and Red Meat Sector Strategy

Existing research and development that will assist production gains

The majority of venison consumption is confined to a short seasonal period (European winter)

Lack of consumer awareness of differentiating and premium qualities of New Zealand farm raised venison

Lack of systems and methodical approach to enable market-led delivery



# 1. REFLECTIONS

## P2P PROGRAMME STEERING GROUP CHAIR



It has been a privilege to chair the Passion2Profit (P2P) Programme from its inception as a Primary Growth Partnership (PGP) in 2015, through to the end of the Sustainable Farming Futures Fund (SFFF) programme. It is a great concept, for which the Ministry for Primary Industries (MPI) should be applauded.

Deer farming needed a lift to ensure it remained competitive with other land-uses. P2P presented the opportunity to achieve that lift through two programme strands: Marketing Premium Venison and Market-Led Production.

I would like to thank former DINZ CEO Dan Coup and his successor Innes Moffat, the DINZ board and staff for their part in bringing our programme to life. Without it, we would not have seen the five venison marketing companies working together for the good of New Zealand deer farmers. Nor would we have seen the Advance Party (AP) programme, a wonderful farmer network, which has helped farmers learn from each other much more quickly and effectively. Throughout the term of P2P, APs helped deer farmers discuss and disseminate new ideas and information. This was particularly so around environmental challenges, but it also empowered them to make meaningful productivity gains.

We did not have a perfect run. No one could have foreseen the entire global foodservice

sector's shutdown in 2020 as a result of Covid-19-19. As a niche product targeting high-end restaurants, venison was hit particularly hard, and prices almost halved. The venison marketers have done a fabulous job pivoting to retail channels and prices are now well on the way to recovery.

The journey sparked by P2P is still underway. I hope venison marketers can maintain their constructive team approach and that work continues to help deer farmers meet their environmental and climate challenges while taking advantage of the improved productivity tools now available to them.

As an independent chair, sitting between MPI and the deer industry, I was always conscious that we had to make a difference for those who were investing in P2P. I believe we have. While we did not achieve all of the aspirational targets we set ourselves seven years ago, I firmly believe P2P has successfully set the sector on a better track for the future.

I would like to thank all of the members of the P2P Steering Group for their contributions and also the many farmers who participated in P2P.

Finally, our appreciation must go to both former Minister of Primary Industries Nathan Guy and current Minister of Agriculture Damien O'Connor for their support of this 'Passion to Profit' deer industry programme.

**Bruce Wills, ONZM**

P2P Programme Steering Group Chair (2015-2022)

## PROGRAMME MANAGER



The development of the Passion2Profit programme recognised the passion our deer farmers have for the industry, but that not everybody had the tools or confidence to capitalise on the achievable productivity improvements. There was also a need for better use of nutrition, genetics and animal health planning to better align production with market demand.

We set very ambitious targets for the marketing programme and bold targets for farmer engagement and behaviour change, which were met enthusiastically. I am pleased with the results.

While Advance Parties were the centrepiece of the Market-Led Production sub-programme, a raft of other activities developed resources for our deer farmers that will stand us in good stead for the future. These include the Deer Hub online, the Deer Facts series, tools to monitor growth and reproduction and setting key performance indicators to track improved productivity. Farmers engaged with animal health planning, production recording and feed planning as part of the programme. Later, the programme's focus was widened to incorporate environmental management, an area that is relevant to both velvet, venison marketing and on-farm production

Our work with the five venison marketing

companies yielded good results with the development of new markets in China and the United States, but progress in traditional European markets remained tough and was severely disrupted by the closure of foodservice outlets in 2020 and 2021 by the Covid-19 pandemic. Through P2P, we were able to support the companies to pivot to retail in the United States – a new market for venison, which is now also making material gains. But it is delightful to see one of the original companies involved in the Summer Cervena programme in Europe now reporting substantial gains as European foodservice recovers in 2022.

For me, the enthusiastic engagement from our deer farmers in their programmes has been the highlight.

Enormous thanks goes to DINZ staff, contractors, facilitators, members of the theme groups and the P2P Advisory Group and Marketing Working Group for their passion and dedication to the work that needed to be done.

We are taking that enthusiasm, that has been with us since day one of the programme, through into the work that follows on from our Primary Growth Partnership. This will continue to produce premium products from New Zealand's extensive pasturelands for discerning consumers around the world.

**Innes Moffat**

P2P programme manager 2015-2019

DINZ chief executive 2019-current

## 2. EXECUTIVE SUMMARY

The Passion2Profit (P2P) programme has been successful for the deer sector. Guided by our original vision, *“to inspire the New Zealand deer industry to profitably grow and market the world’s best red meat”*, the programme was well received by the sector when it started in mid- 2015. This momentum carried through to the programme’s end in September 2022.

All of our stakeholders bought into the \$16 million programme –deer farmers, through the NZ Deer Farmers Association (NZDFA) and Deer Industry New Zealand (DINZ), all five venison marketing companies and the Government through the Ministry for Primary Industries (MPI). All recognised the chance for transformational change to improve productivity and profitability for our sector.

The funding support from MPI proved pivotal in enabling the development of resources and scaling of the programme to engage as many farmers as possible.

This industry-wide collaboration demonstrated the strength of working together for a combined goal.

P2P was made up of two sub-programmes: **Marketing Premium Venison** and **Market-Led Production**. They were linked by farm assurance initiatives that connected producers more closely to market signals. This work was overlaid with a set of **Bottom Line Objectives** with specific targets. While not all of these could be met, progress was nonetheless encouraging given the Covid-19-related challenges that emerged part-way through the programme.

In the period before Covid-19, the initial, ambitious targets were adjusted to more realistic levels at the programme’s half-way point in 2018.

The Covid-19 pandemic subsequently caused major market disruptions for the deer industry, more so than for some other primary sectors. Both venison and velvet production were affected by supply chain issues, while venison was hit hard by falling demand from traditional markets where foodservice was decimated for a time.

Marketing companies and DINZ personnel demonstrated flexibility and worked hard at short notice in response to this impact on foodservice. The P2P Marketing Premium Venison sub-programme in particular pivoted New Zealand venison away from foodservice to instead target retail, principally in the United States and China. As a consequence, this programme concluded a year later than initially planned.

This had inevitable impacts on progress towards programme goals, but in the process both farmers and marketers showed remarkable resilience and adaptability. And while Covid-19 disrupted the industry, it did not deter farmers from meeting the programme objective of growing more deer, heavier and faster.

Increasing returns from deer velvet through this period provided an opportunity for farmers to rebalance production with more emphasis on velvet providing some relief from the squeeze on returns from premium venison markets.

A final key measure of success is that farmers want to continue the programme following the end of joint funding and together with Industry will continue to fund the initiatives developed and continue to grow a profitable and sustainable deer industry.





*This connection between markets and producers was the basis of the two sub-programmes: Marketing Premium Venison and Market-Led Production.*

## Exec summary table

Systems and resources were developed for farming deer more efficiently, and extension methods were developed and implemented by deer farmers which enabled:

- Increased survival to slaughter by 4%
- Increased average carcass weight by 9%
- Collaborative market development and diversification of venison markets towards China and North American retail
- Increased velvet supply
- The development of quality assurance standards and certification of the majority of venison suppliers in the Farm Assurance Programme
- The successful 29 Advance Party groups of farmers implementing productivity gains
- The formation of 15 Deer Industry Environmental groups and completion by 200 farmers of the Farm Environmental Plans
- Extension outreach programmes were developed and delivered to up-skill 500 rural professionals in deer system knowledge and programmes to attract students to the deer industry.
- An estimated positive benefit of \$43 million dollars to farmers and the economy as a result of the programme.

### 3. PROGRAMME FOUNDATIONS

The Passion2Profit programme has its origins in an initiative floated several years earlier, the Productivity Improvement Programme (PIP). At its annual conference in Wanaka in 2012, the industry was presented with a challenge – to improve on its productivity, which had been stagnating for the previous decade.

This was spelled out through various metrics such as survival of fawns to sale, carcass weights and kg output per hind. There had been virtually no improvement, and this made the industry vulnerable to competition from other livestock enterprises as well as market pressures.

The then DINZ chair, Andy Macfarlane, mapped out an ambitious plan for productivity gains over the following two decades. The measures of success, such as EBIT per kg output, would be meaningful and achievable.

A Productivity Leadership Group had teased out a range of measures that could be used to monitor industry performance. The PIP had five theme groups, covering animal health, genetics, nutrition, freedom to operate (welfare, environment) and processing (product quality).

A theme for this initiative was the strong cooperation between farmers, veterinarians, scientists, processors and marketers in the makeup of the Productivity Leadership Group. All those with a stake in the value chain were involved.

This kaupapa and the organisation of initiatives into streams such as nutrition and genetics, was retained for the next iteration of this programme as it evolved into the proposal for a seven-year Primary Growth Partnership between the Government and the Deer Industry: Passion2Profit.

The challenge of uptake, or practice change,

was already well understood within the PIP and was a major focus of attention for Passion2Profit. This had been sparked by the first of a series of in-depth studies of deer farmer attitudes and practices by research company CINTA.

It was against this background that the deer industry sought to scale up the objectives of the PIP through a Primary Growth Partnership with the Government. Only through a partnership like this would sufficient resources be available, over a sustained period, to help realise these ambitions.

In the application for the PGP, submitted in 2014, the deer industry built on the themes identified in the earlier, industry-driven PIP programme: these focused on the need to diversify into new markets and market segments for venison products, supported by farmers utilising new technologies, knowledge and farming systems to deliver what markets demanded (see original objectives in box below).

At the time of this application, venison production was geared heavily towards European premium markets in the northern hemisphere autumn. It was noted then that in the future “this may mean something different”.

Eight years later, as the Passion2Profit programme wraps up, those words have proven to be prophetic.

## PASSION2PROFIT: ORIGINAL OBJECTIVES

- Increase the amount of venison sold in chilled form, year round, at higher prices through collaborative branding and positioning of New Zealand venison in new markets or new market niches.
- Uncover the opportunities in new markets such as China and also to position the finest venison as a new, exotic, non-seasonal grilling concept in European markets
- Diversify the consumer base for New Zealand venison, thereby spreading market risk, and extend the seasonal consumption period – allowing greater sales of higher value chilled venison.
- Package the systematisation of Feeding, Genetics and Animal Health knowledge, and to create an industry champion for each.
- Create new, innovative opportunities to engage with farmers to deliver the above solutions
- Give greater engagement for practice change to create new, in-person, on-line and correspondence mechanisms for champions and others to engage and drive adoption solutions.

### Case study 1:

## ADVANCE PARTY ENVIRONMENTAL GROUP RECOGNISED

The Southland Environmental Advance Party recognised, understood and worked to reduce the environmental impacts of their farming operations. This commitment was recognised soon after the group formed when they won the 2019 AON Environmental Action in Water & Land Management Award, organised by Environment Southland.

“The newly formed Southland Environmental AP hit the ground running when it came to their environmental plans and the action they took in their community,” the judges noted.

Members each had their own project such as water quality testing, creating sediment traps, fencing off critical source areas and planting out and creating wetlands. The strong and enduring relationships established within the group, “contribute to positive outcomes on and off farm,” the judges said. “They believe in having honest and frank conversations, which leads to better management overall. All farms had an established Farm Environment Plan and the group was being used as a model for the industry nationwide.”





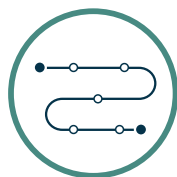
## 4. ACHIEVEMENTS

### FINANCIAL ANALYSIS

An analysis has been carried out of the on-farm value to New Zealand farmers and the economy, and shows an NPV of \$43million at a 6% discount rate. The benefits identified have been gained from case study information. The period of the programme saw a decrease in venison price and herd size. With that, the programme became more of a pivot towards velvet production rather than venison. The programme development of resources for improved feeding, animal health and genetics, together with the innovative Advance Party approach enabled significant gains in productivity and efficiency of deer farming.

As venison prices recover, and herd rebuilding occurs, and further farmer adoption takes place, we anticipate significant further economic benefits will accrue from the collaborative market approach, and new market development enabled by this programme.

### KEY FACTS



#### Programme start

October 2015

#### Length

7 years



#### PGP funding

\$7,049,402

#### Industry funding

\$7,634,399

#### Total spent

\$14,683,801



#### Commercial partners



**Deer Industry**  
New Zealand



**NZDFA**  
NZ Deer Farmers Association









## 4A. BOTTOM LINE OBJECTIVES

# GROW THE BREEDING HERD

## ► OUR OBJECTIVES

Increase breeding hind herd numbers by 34,500 (11.6%)

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## THE OUTCOME

### Not achieved

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Hind numbers 2015: 430,000

Hind numbers 2021: 365,000k

Drop in hind herd: 15%

## HOW IT PLAYED OUT

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A long-term fall in hind numbers plateaued in 2018 and 2019, which was encouraging. However it resumed following the severe impact of Covid-19 on foodservice demand for venison from 2020.

Hind productivity increased as a result of P2P (see Market-Led Production sub-programme). To date, these gains have been insufficient to compensate for the higher cost of environmental compliance in certain land classes.

The higher relative profitability of velvetting stags and lamb production during this period has also played a part.





# INCREASE SURVIVAL TO SLAUGHTER



## OUR OBJECTIVES

Increase survival by 4%, from 72% to 76%

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## THE OUTCOME

### Achieved

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Fawn survival rates across the industry increased by 4%

## HOW IT PLAYED OUT

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This has been a significant achievement and has shown the potential for further increases in hind productivity

# INCREASE AVERAGE CARCASS WEIGHTS



## OUR OBJECTIVES

Increase weights by 5 kg from 55 kg to 60 kg (9%).

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## THE OUTCOME

### Partially achieved

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Average carcass weights lifted by 4 kg (up 7%) from 55 kg to 59 kg.

## HOW IT PLAYED OUT

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This has been an encouraging development after a long period when average carcass weights had been static. The lessons learnt through P2P in the areas of nutrition, genetics, animal health and deer management showed there is potential to keep up this momentum for improvement.

# INCREASE IN VENISON EXPORT REVENUE:

## ► OUR OBJECTIVES

Increase revenue by 40% (\$21 million a year)

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## THE OUTCOME

### Not achieved

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In the face of the Covid-19 pandemic, efforts to increase income from venison at a national level were not successful.

Venison exports

2015: \$181 million

2021: \$155 million

## HOW IT PLAYED OUT

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The biggest driver of the targeted increase in exports was increased hind numbers, so the reduction in the hind herd put this out of reach.

The “force majeure” of the Covid-19 pandemic pushed venison prices down sharply in 2020. They had recovered some but not all of their lost ground by 2022.

Although working from a smaller production base, the venison industry finished P2P in a strong position for further recovery, with more diverse markets and channels.



## Case study 2:

# NORTH OTAGO STATION LIFTS PRODUCTION

## Programme highlights

- Deer stock units increased 71%, overall stock units up by 36%
- Shift from breeding only to breeding and finishing
- Improved conception rates
- Greater use of recording and monitoring
- New focus on breeding values for genetic improvement
- Animal health plan developed and reviewed annually

## Farm summary: 2021

|                           |                                                                                                                                                                        |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Location</b>           | North Otago, near Kurow                                                                                                                                                |
| <b>Area (eff.)</b>        | 7,200 ha                                                                                                                                                               |
| <b>Deer fenced</b>        | 850 ha                                                                                                                                                                 |
| <b>Sheep stock units</b>  | 9,832                                                                                                                                                                  |
| <b>Cattle stock units</b> | 4,851                                                                                                                                                                  |
| <b>Deer stock units</b>   | 8,404                                                                                                                                                                  |
| <b>Landscape</b>          | Downlands with 260 ha of irrigation, moderately subdivided and oversown and top-dressed mid country and extensive high country blocks adjoining conservation forestry. |
| <b>Deer stock policy</b>  | Venison only, breeding and finishing on farm. Red replacement breeding hinds bought in. All mated to terminal sires, a mix of elk/wapiti and B11 (a hybrid).           |

## Changes: 2016–2021

|                              | 2016      | 2021      | % change |
|------------------------------|-----------|-----------|----------|
| Total stock units wintered   | 16,653    | 23,087    | +36%     |
| Deer stock units wintered    | 4,919     | 8,404     | +71%     |
| Deer fenced area             | 785 ha    | 850 ha    | +8%      |
| Deer stocking rate           | 6.3 su/ha | 9.9 su/ha | +58%     |
| Overall conception rate      | 86%       | 93%       | +7%      |
| 2nd fawners conception rates | 81%       | 96%       | +15%     |
| Venison sales                | 21,067 kg | 52,533 kg | +149%    |



## Commentary

After joining the P2P Advance Party the deer policy changed from mainly selling stores to finishing all deer on the property. Deer are run on the easier country but the stocking rate was also able to be increased by changing to rotational grazing on the hills and pasture improvements with clovers and cocksfoot. Weaners are finished on irrigated crops and lucerne.

Hind conception was a major focus for the farm when they joined the P2P Advance Party. Second fawners were performing poorly after being bought-in as in-fawn first fawners. A change in genetics, preferential feeding and keeping the younger hinds separate from the mixed-age herd helped resolve the issue (see graph below).

The large increase in venison sales was partly due to the change from selling stores to breeding and finishing, but the farm has also been able to sell more venison earlier in the season, an important objective.

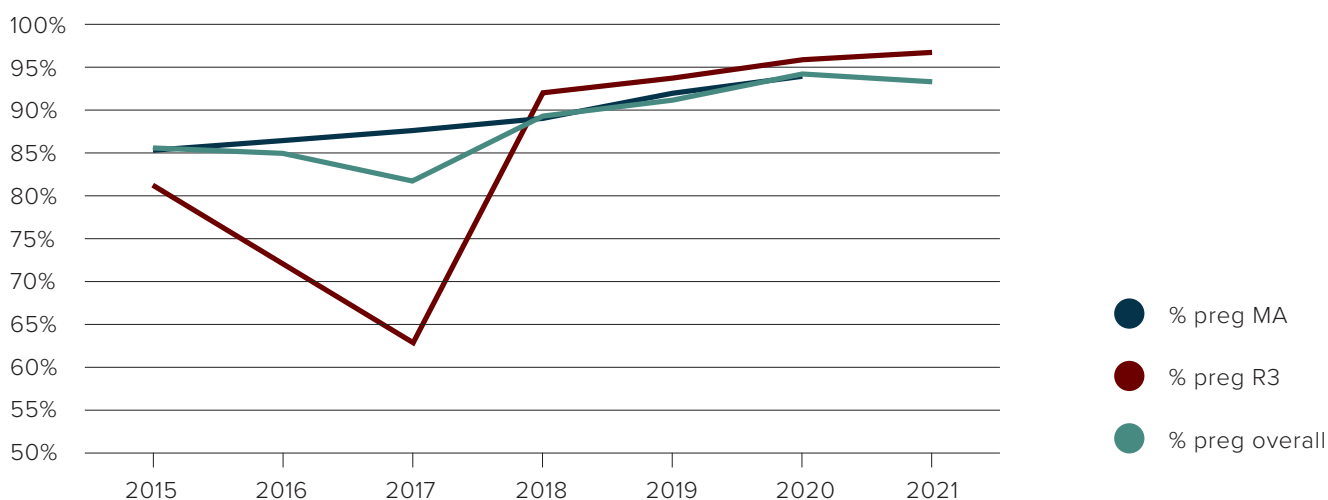
Other positive changes since joining the AP have included greater use of EID, scanning and recording weights to track growth rates, and the introduction of routine body condition scoring.

The farm has developed an animal health plan reviewed annually with the veterinarian.

Breeding values are used to inform decisions about buying sire stags.

The farmer gets value from getting out with like-minded people at P2P Advance Party meetings. He has been introduced to support such as the DINZ website and feels like they are not alone running a deer farm. He concludes that: "the information sharing in the P2P Advance Party has been really helpful and it is a secure group were you are safe to share things."

### Conception rates in Mixed Age and Rising 3 year-old hinds and overall conception rate from 2015 to 2023



## Marketing Premium Venison case study 1

# CHINA

## ALTHOUGH CHINESE CONSUMERS DON'T HAVE A TRADITION OF EATING VENISON, THERE IS NONETHELESS BIG POTENTIAL FOR ESTABLISHING AND GROWING A MARKET FOR NEW ZEALAND VENISON IN THIS MARKET.

Doing so would help diversify markets and reduce the pressure to squeeze premium venison production into the one relatively short season available in traditional European markets. It would also help diversify utilisation of the venison carcass, adding value to parts that don't normally attract much demand in Western markets.

The key to success is to find ways to present and prepare venison in ways that suited Chinese cuisine and tastes.

Work on developing a market in China started early in the Passion2Profit programme and continued throughout. As venison exports to China grew throughout this period, this market development work provided valuable insights into how this product could fit with, and complement, traditional Chinese cuisine.

### Preliminary work

Initial work by global market research agency IPSOS highlighted challenges for venison in the Chinese market – not least from Chinese consumers and chefs unfamiliar with the meat. However a Marketing Working Group of New Zealand's five venison exporting companies wanted to better understand the opportunities for New Zealand venison in parts of China.

### Pilot project shows high-end potential

A 2016–2017 Passion2Profit-funded collaboration between Mountain River Venison and China-based New Zealander Hunter McGregor (Shanghai Rata Trade Company) ran a pilot project involving visits to more than 190 chefs working in Western-style restaurants in 12 regions.

DINZ Executive Chef Graham Brown spent two weeks talking to chefs and giving workshops and venison tastings at the ShangriLa Pudong in Shanghai on China's east coast, the Beijing Westin Hotel in the northern capital and the Chongqing Intercontinental hotel in the country's south-west. The project also worked with NZTE, using its kitchen facility in Shanghai to conduct a tasting session with Chinese fine dining chefs.

About 5,300 kg of venison was sold as a direct result of samples and/or meetings during the trial.

While there is potential for high-end middle cuts in this market, cuts like shanks, ribs and boneless shoulders were found to be the best cuts for slow-cooked Chinese dishes.

High-end Western-style restaurants in Shanghai were



*Smoked and cured venison salad served with mixed micro greens, sour cream dressing and strawberry dice is one of three starters proposed by Swiss chef Christophe Zoller for The Cut's new menus at the Fairmont Hotel, Beijing.*

identified as the suitable starting point for introducing farm-raised New Zealand venison.

Further work was then undertaken into how venison might be used in Chinese cuisine.



*Chef Shen, one of six chefs working with DINZ on recipe development*

Testing by chefs revealed that of China's eight culinary styles, two – the Sichuan and Shangdon-Lu cuisines – as the best match for New Zealand farm-raised venison.

Further market development work in China conducted with Tribal Brands Asia market research and reported in 2021, gave deeper insights into how venison fits into the context of Chinese cuisine. It also highlighted the disparity between Western and Chinese cut types and how chefs view them.

In contrast to the heavily trimmed primal cuts usually preferred by Western chefs, the Chinese cooks preferred cuts that were in more whole form, such as entire ribs or flaps, leaving them capable of trimming and shaping them as required.

The exercise also revealed contrasts between Chinese and Western chefs in the way they view meat texture. Attributes such as dryness or 'toughness' were not necessarily seen as negatives. It also showed that unlike European cuisine where the venison might be the centrepiece of a meal, in China it might have equal billing with other components such as noodles, vegetables and spices.

The chefs' dishes encompassed a range of styles and tastes from sweet and sour venison ribs to Sichuan stir-fry venison rump, but the work revealed the piquant, pungent flavours used in much of Chinese cuisine complemented venison well, while soaking in oils and fats enriches venison's fine texture.



*The work revealed the piquant, pungent flavours used in much of Chinese cuisine complemented venison well.*



## 4B. SUB-PROGRAMME 1: MARKETING PREMIUM VENISON

### THE ORIGINAL PROPOSITION

The business case for Passion2Profit noted there was a risk that NZ might miss the opportunity to derive full market value from our farmed venison products. It identified an opportunity to:

*Collaborate to brand and position lean, tender, farm raised venison as a luxury, non-seasonal red meat in new markets and new market segments. Whole-of-industry resources can be harnessed to position a shared brand of venison that is backed by a common set of product and production quality assurance standards.*

The following summary spells out how this opportunity was taken up over the seven years of the P2P programme.

# RETAIL MARKET DEVELOPMENT <sup>1</sup>

## ► OUR OBJECTIVES

Marketers work together to open new markets where NZ venison will be positioned as a luxury, non-seasonal meat.

## THE OUTCOMES

### Exceeded: US retail

2015 retail sales: 0

2021 retail sales: 165 tonnes

2022 retail target: 450 tonnes

## HOW IT PLAYED OUT

US retail became critically important when the Covid-19 pandemic broke out.

NZ venison quickly progressed from minimal sales to being sold in hundreds of US supermarkets

“Bricks” of ground venison opened the door for higher-value cuts

This has been a big P2P success story!



*“Bricks” of ground venison like this have been a great entrée into the US retail market*

<sup>1</sup> New markets and channels were also developed outside the P2P framework during this period, e.g. in the Gulf states and Scandinavia.

# NEW MARKET DEVELOPMENT



## OUR OBJECTIVES

Marketers increase year-round demand in new markets such as China, reducing reliance on the seasonal European game market.

## THE OUTCOMES

### Exceeded: China

China is now NZ's 4th-largest venison market

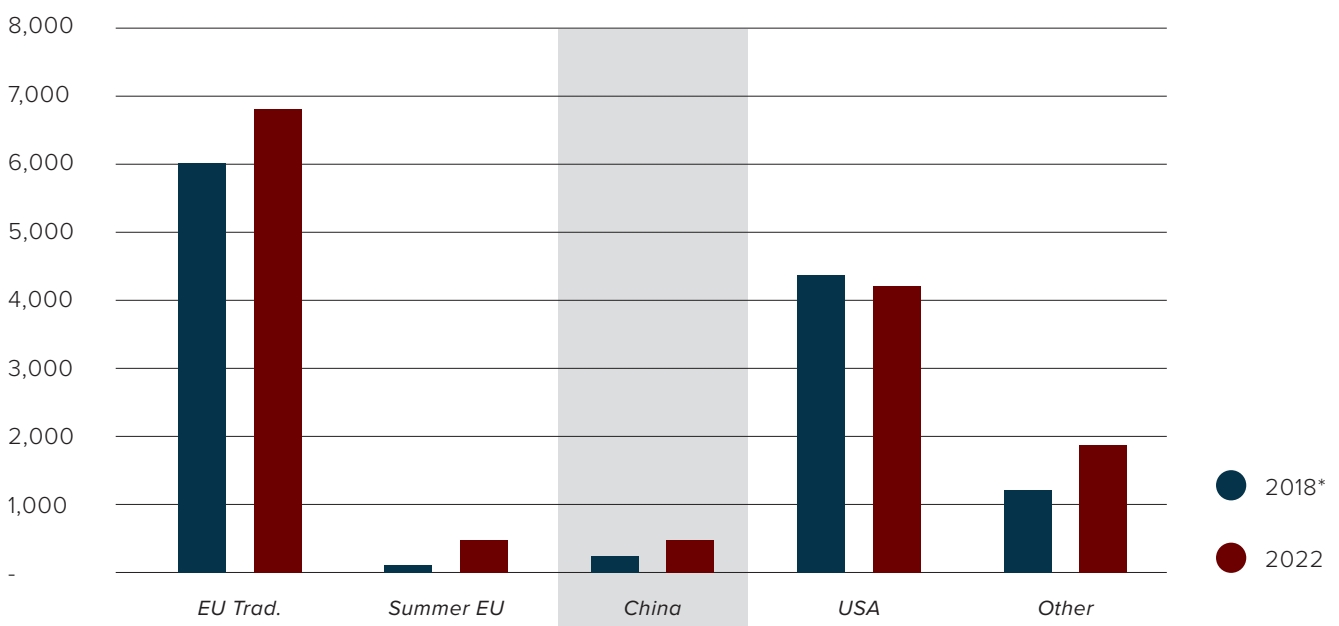
Between 2018 and 2022, China's share of New Zealand venison exports quadrupled and there are good signs the growth will continue.

## HOW IT PLAYED OUT

The pandemic-induced shutdown of US/European restaurants made new markets like China even more important. Despite achieving access in 2008 volumes had not grown. P2P focused resources accelerated demand for venison by developing greater understanding of the place of venison in differing Chinese cuisines.

New market development work has opened up markets that compete with traditional markets for non-premium venison

There is more to come: market development in China is still in its early stages.





# CHILLED VENISON EXPORTS



## OUR OBJECTIVES

- Increase the volumes, year-round
- Increase prices received.

## THE OUTCOMES

### Achieved: higher prices

2015–2019 average chilled export value grew 16% to \$25,700/tonne

### Not achieved: higher volumes

2015–2021 volume sold chilled fell from 2,500 to 1,400 tonnes

## HOW IT PLAYED OUT

The mixed results for chilled venison are a direct result of logistical and market disruptions from Covid-19-19. Suppliers who use to take chilled product shifted to frozen to avoid being stuck with short shelf life product during lockdowns.

Shipping space for chilled was limited, so more had to be sent frozen.

In China, NZ's rapid growth market for venison, market access for chilled venison is yet to open up.



*Shipping logistical issues during the Covid-19-19 pandemic created big hurdles for exports of chilled NZ venison, while the closure of foodservice outlets in key markets softened demand*

# COLLABORATIVE MARKET DEVELOPMENT

## ► OUR OBJECTIVES

The five largest venison companies – Alliance Group, Silver Fern Farms, Duncan and Co, Mountain River Venison and First Light Foods – will collaborate in market development.

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## THE OUTCOMES

### Achieved: Collaborative benefits realised

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Research and market insights shared.

Exclusive long-term distribution arrangements

Trust built between exporters

## HOW IT PLAYED OUT

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Working collectively, exporting a niche product into diverse markets, the five main venison exporters achieved new levels of trust and gained insights they wouldn't have made working alone. The initiative has worked extremely well.



**Terry O'Connell**  
Alliance



**Rob Kidd**  
Duncan NZ



**Matt Gibson**  
First Light



**John Sadler**  
Mountain River  
Venison



**Peter Robinson**  
Silver Fern Farms

Left:  
Representatives  
of the five main  
venison exporters  
came together for  
a joint presenta-  
tion at a deer in-  
dustry conference  
in 2021.

---

*The level of  
cooperation in the  
venison market  
achieved by the  
P2P Primary  
Growth Partnership  
exceeds other  
sectors in the meat  
industry.*

– Sapere audit 2018

# ON-FARM QA STANDARD

## ► OUR OBJECTIVES

- A single set of product and production quality standards
- Standards applied by year 7 (2022) across all venison companies.

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## THE OUTCOMES

### Achieved: Standards developed

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On-farm standard integrated into NZ Farm Assurance Programme

Standard applied by all five venison companies

90% of eligible deer farmers have been certified by the Farm Assurance Programme, providing proof of the care and quality of the venison for discerning customers worldwide.

## HOW IT PLAYED OUT

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A common set of standards streamlines and simplifies audit requirements

The standards are strengthening market positioning for NZ venison



*A single set of on-farm production quality standards has been integrated into the NZ Farm Assurance Programme. The standards are now applied by all five venison companies.*



# TRIAL FOR NON-SEASONAL MARKET DEVELOPMENT IN EUROPE

## ► OUR OBJECTIVES

- Create a premium market in smaller markets in Europe outside the winter game season.
- Position venison as a new, exotic, non-seasonal grilling concept for summer.

## THE OUTCOMES

### Partly achieved: Increase in non-seasonal sales

NZ Cervena™ venison marketed as a summer BBQ grilling item through Dutch, Belgian and German foodservice channels

Two NZ marketers continues to promote summer through distributors in Belgium and Netherlands.

## HOW IT PLAYED OUT

Positive feedback from chefs but some distributors discontinued the programme as sales didn't meet expectations.

Covid-19 closed restaurants in 2019/2020 severely disrupting the programme

Some companies continue selling NZ venison in summer under their own brands

More venison is being sold as premium grilling cuts in European markets.





**cervena.**  
PURE FREEDOM



**CERVENA, NIETS DAN VOORDELEN**

Nieuw-Zeeland is een eilandengroep die door zijn geïsoleerde ligging en zijn eindeloze graslandschappen de ideale voedingsbodem is voor puur natuurlijke veeteelt.

De Cervena certificatie geldt enkel voor dieren die (1) het hele jaar door vrij rond lopen, (2) exclusief met gras & hooi gevoed, (3) vrij van hormonen, antibiotica of groeiversterkers en (4) maximaal 3 jaar oud zijn.

◆ **Cervena in de keuken**  
Geen afval: geen vet (enkel silverskin te verwijderen)  
Steeds even mals: geen onderscheid tussen bout of rugdelen  
Ideaal voor zomerse bereidingen

◆ **Cervena op het menu**  
Mager, bijna geen vet (<3%)  
Zachte fijne smaak  
Rijk aan proteïne & ijzer  
Steeds super mals & sappig

CERVENA.BE



# PRODUCT DEVELOPMENT

## ► OUR OBJECTIVES

Develop a protein bar that converts manufacturing grade venison into a sought-after product.

## THE OUTCOMES

### Partly achieved

A product with consumer potential created and undergoing commercial development.

## HOW IT PLAYED OUT

Aspirations for a co-owned joint venture to take a product to market didn't stack up among the partners.



*While a co-owned joint venture for a venison-based protein bar didn't even-tuate, products using NZ Venison are being developed in the US market.*



## Case study 3:

# DNA UNLOCKS PATH TO GENETIC IMPROVEMENT

## Programme highlights

- Adoption of DNA parentage testing and an integrated recording system has enabled easier management and faster genetic improvement among home-bred velvetting stags.
- Greater use is being made of breeding values to also help accelerate genetic improvement.
- Genetic improvement has meant more 2 yo stags are available for live sales as velvetters and fewer are culled into meat production (live sales are worth about twice as much as the carcass value).
- Indoor wintering for stags has been introduced. This has welfare, production and environmental benefits.

## Farm summary: 2021

|                                         |                                          |
|-----------------------------------------|------------------------------------------|
| <b>Location</b>                         | Southland, near Winton                   |
| <b>Area (eff.)</b>                      | 153.5 ha                                 |
| <b>Deer fenced</b>                      | 153.5 ha                                 |
| <b>Landscape</b>                        | Flat                                     |
| <b>Altitude</b>                         | 82 m asl                                 |
| <b>Climate</b>                          | Year-round rain; summer safe; winter wet |
| <b>Soils</b>                            | Silt loam                                |
| <b>Drainage</b>                         | All tile drained                         |
| <b>Subdivision</b>                      | 35 paddocks                              |
| <b>Total breeding hinds (incl R2)</b>   | 592                                      |
| <b>Total stags velvetted (all ages)</b> | 405                                      |

## Changes: 2016–2021

|                                                         | 2014/15 | 2020/21 | % change |
|---------------------------------------------------------|---------|---------|----------|
| Average velvet weights* of 2 year olds retained in herd | 3.81 kg | 4.33 kg | +13.6%   |
| 2 year old velvet weights (average, first cut)          | 2.88 kg | 3.54 kg | +23%     |
| 3 year old velvet weights (average, first cut)          | 4.2 kg  | 5.86    | +39.5%   |
| 2 year old culling rate                                 | 39%     | 7%      | -32%     |
| 2 year old culls, average velvet weight                 | 2.02 kg | 2.7 kg  | +34%     |

\* includes regrowth

## Commentary

This farmer belongs to two groups: a P2P Advance Party (AP) and a P2P Deer Industry Environment Group (DIEG).

The operation is focused on velvet production and the AP members encouraged this farmer to make better use of available services and technology to enable faster genetic gains.

The farm had not been using electronic recording for animal production when it joined the AP. With the advice of group members they opted for an integrated system that linked electronic identification (EID) recording with electronic velvet scales. This allowed more accurate and immediate recording and meant decisions on retaining or culling 2-year-old stags based on their velvet weight could be made on the spot, saving a lot of time.

Although the identity of a velvet stag's sire was known, the identity of the dam – which confers half of the velvet production genes – was not. Using DNA parentage testing, the farm has been able to identify the dams of poorer-performing velvet stags, and remove them from the breeding herd.

This, with the greater use of velvet production breeding values for sire selection, has enabled faster genetic gain.

The farm has a policy of retaining the best-performing 2-year-old velvet stags for their own herd, selling the next tier down to other farms as velvet stags. The poorest are culled and sent off for meat processing. Young stags sold live are worth about double the return for a culled stag sent for venison. Thanks to the improvement over a few

years of the programme, fewer stags are culled (now 7%, previously 39%) and correspondingly more can be sold live, giving a better return.

Following encouragement from other AP members, this farm has introduced indoor wintering for older stags, and has since constructed a purpose-built shed. The main benefits from this are environmental as it reduces soil damage and nutrient runoff in wet winters and means a smaller area of crop is needed. The farm is also considering indoor wintering for hinds, which would make early spring pasture more available for velvetting stags, as well as preventing soil loss.

As a member of the Southland DIEG, the farm has also started measuring water quality as it enters and leaves the farm, has planted and fenced off runoff areas below deer sheds to reduce nutrient loss, and has completed its Farm Environment Plan.

The farmer says membership of the groups has increased his knowledge and given him the confidence to try new things more quickly than he otherwise would have. He says belonging to the groups also has strong social and mental wellbeing benefits.



Water quality sampling.



Purpose-built deer wintering shed.



## Marketing Premium Venison case study 2

## EUROPE

**GETTING DEER GROWN TO PREMIUM SIZE AND CONDITION IN TIME TO COINCIDE WITH THE PERIOD OF PEAK DEMAND FOR VENISON IN THE EUROPEAN AUTUMN CAN BE CHALLENGING. WHILE IMPROVEMENTS IN GENETICS, NUTRITION AND USE OF TERMINAL SIRES HAVE ALL MADE A DIFFERENCE, SUPPLYING VENISON DURING THE PEAK AUGUST–OCTOBER PERIOD DOES NOT SUIT ALL FARM SYSTEMS.**

In order to diversify the existing European market, the Passion2Profit programme sought to create demand for premium Cervena venison outside the traditional autumn game season to the European summer, by taking advantage of its delicate taste and texture and reframing the product as ideal for light, fresh and easy summer meals. Initial work on this programme focused on the three Benelux countries before expanding to Germany.

Promotion started with a trial in 2016 before building up the following year and running through to 2019. (The Covid-19 pandemic put a stop to further promotional activity from 2020, although New Zealand venison exporters remained active in these new seasonal markets in subsequent years.)

### Belgian food media event

One of the early events to lift the profile for summer Cervena in Europe was a series of pre-season tastings at three Belgian Restaurants in March 2017.



*Media guests ready for dinner Vous Lé Vous restaurant. Each table featured the story of one of Alliance Group's farm suppliers.*

The activity, aimed at influencers in the Belgian food scene, was a collaboration between Metro – the wholesaler who works with Alliance Group and its importer Bimpex meats – DINZ and the Jeune

Restaurateurs d'Europe chefs, a network of young and innovative Belgian chefs.

Eighty-five writers, radio journalists and bloggers accepted invitations to attend the three Cervena tasting evenings, which met with an enthusiastic response.

The events, which were given a high profile on social media and traditional media channels, built on the success of an earlier trial by Metro in 2016

### Sustainability message strikes a chord in Netherlands

Luiten Food, a specialised importer and distributor of meat and poultry in the Netherlands, has a long-standing partnership with Silver Fern Farms and in 2016 took part in the P2P Cervena trial. DINZ chefs Shannon Campbell and Graham Brown helped spread the word about New Zealand venison in Europe during the programme.

Influential food bloggers Nina and Elise from **chickslovefood.com** backed the Cervena promotion to their 40,000 Facebook and 70,000 Instagram followers, promoting the product as “hormone free” and healthy.

A competition in the Netherlands for a Cervena dinner at a restaurant had an impressive 50,000 entries, with the winners spreading more positive coverage through social media.

The male-friendly and trendy BBQ market in the Netherlands was also tapped through BBQ world champion Jord Althuisen and his “Smokey Goodness” website. He has a strong presence across various social media platforms as well as on television.

Luiten Food sold 20 tonnes of New Zealand Cervena in 2016 as part of the Passion2Profit trial and was keen to grow that volume. The company said the sustainability of food production in New Zealand provides a unique selling point for Cervena in the Netherlands.





*Jord Althuisen helped introduce venison to a blokey BBQ market in the Netherlands.*

## Volumes stable despite rising prices

In 2018, the third year of the April–August Summer Cervena Passion2Profit programme in Europe, sales volumes of the high-quality chilled venison remained at a stable 90 tonnes in Germany and Belgium, worth nearly \$3 million. (Germany was added to the programme in 2017.)

The campaign overlaid exporters' more targeted tactical work in the market and followed up launch activity from Silver Fern Farms the previous year. Key activities included:

- A press dinner at one of Germany's top restaurants, the Michelin-starred Carmelo Greco. Guests included eight key food media and bloggers.
- Food bloggers were sent Cervena samples and invited to create new and innovative summer recipes – these soon appeared on blogs such as Wunderbrunnen, Magentratzerl and Patricia Pöttsch's uhiesig.
- Five high-end restaurants around Germany were



*Silver Fern Farms' Cervena cooking demonstration and tasting with Delta at the Internorga Show in Hamburg in March 2018.*

selected to offer a summer Cervena tasting menu for at least two weeks. Each promoted their menu and Cervena through social media channels.

- The Cervena range was displayed in March at the trade show Internorga in Hamburg.
- In-store tastings at Frische Paradies, a speciality retailer and supplier of fine foods supported with a new web page featuring the product and range of cuts.
- Cooking demonstrations, the development of a new Cervena web page with DINZ video content and public relations work with key opinion leaders and media.

## Foodservice focus for 2019 Summer

### Cervena campaign

Alliance Group, Duncan NZ and Silver Fern Farms worked with DINZ in the third year of Passion2Profit activity raising Cervena awareness for Northern European summer menus and a primary focus on foodservice. In-market activities included:

- In Belgium, culinary demonstrations to introduce

Cervena from Alliance and Duncan NZ to wholesaler Bimpex's sales team at an event for key customers. The event at wholesaler Metro's Chef Academy in Antwerp featured young culinary star Sam van Houcke, assisted by DINZ consultant chef Shannon Campbell.

- Retail trials with Lidl and Delhaize's Belgian stores.
- Cervena promotion at Fine Food Days in Cologne and the Internorga trade fair for chefs.
- A new German language Cervena website.
- Geotargeting Cervena's Facebook page in Germany including video content.



Promotional material developed by Silver Fern Farms, incorporating refreshed Cervena branding.

## Cologne Fine Food Days

The Passion2Profit Summer Cervena campaign continued in Germany through participation in the Cologne Fine Food Days, or Genuss-Festival.

The nine-day event features the region's top chefs and winemakers and Silver Fern Farms, with German distributor Klughardt and DINZ/Passion2Profit provided sponsorship.

The high-profile Cervena stand attracted a lot of attention from attendees.

DINZ consultant chef Shannon Campbell cooked and presented two tasting dishes highlighting the striploin and leg cuts at an opening night event.

While doing so, he had the chance to educate the 400 plus guests about Cervena's origin and quality, which meets the demands of chefs, hobby chefs and gourmets for new, exclusive taste experiences.

Below: Shannon Campbell telling one of the Fine Food Days visitors about Cervena's attributes.









## 4C. SUB-PROGRAMME 2: MARKET-LED PRODUCTION

*Systems to help farmers respond to market demands*

### THE ORIGINAL PROPOSITION

The business case for Passion2Profit noted that the national deer herd had been falling, and that “without change, continued land use change will marginalise this pioneering symbol of primary industry diversification.” It identified an opportunity to:

*Create the systems and culture that allow farmers to integrate new technologies and create farming systems that deliver what markets demand. Today, that means providing more venison in more consistent cut sizes, chilled not frozen, and delivered to Europeans in their autumn. In the future, it may mean something different.*

The following summary spells out how this opportunity was taken up over the seven years of the P2P programme.



# MOTIVATING CHANGE

## ► OUR OBJECTIVES

Develop a mechanism (Advance Parties) for farmers to motivate each other to change on-farm practices through peer-to-peer learning, with the help of a skilled facilitator.

## THE OUTCOMES

### Exceeded targets

The number of APs peaked at 29, directly involving up to *372 farmers* at any one time.

About *one-third of all deer farms* had staff who were involved

At the end of the formal P2P programme, a number of APs have elected to continue operating, partly self-funded.

## HOW IT PLAYED OUT

The Advance Party model has been a runaway success story in this sub-programme, and has since been copied elsewhere.

As well as helping farmers adopt new practices, the groups have been remarkably cohesive, strengthening social bonds and enhancing farmer mental health.

AP membership was especially helpful during the 7 years, as farmers faced multiple challenges from droughts, flooding, severe disruptions caused by the Covid-19 pandemic, and a raft of new regulations affecting their operations.

The building of more resilient farming communities was an unplanned but welcome and highly valued outcome of the AP programme.

Nonetheless, peer-to-peer learning in groups doesn't suit everyone and alternative ways to accommodate others will also be explored.

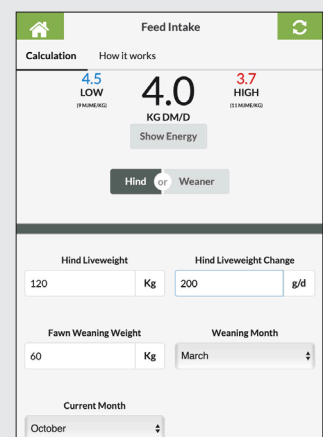


Package technologies into convenient solutions for farmers through a systematised and integrated suite of productivity resources.

## Achieved

**Deer Hub** created on DINZ website for all farmers and rural professionals.

- *Growth curve chart*
- *Deer Fact*
- *Feed intake calculator*





# DEVELOP PRODUCTIVITY BENCHMARKS

## ► OUR OBJECTIVES

Develop productivity benchmarks for meaningful comparisons between farms, motivating productivity improvements

---

## THE OUTCOMES

### Partly achieved

---

Deer KPIs were developed by farmers and specialists and are now available on the RMPP benchmark website.

Farmers are reluctant to collect farm business information needed to assist benchmarking

## HOW IT PLAYED OUT

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This is still a work in progress. Prototypes for benchmarking were developed for market testing and a likely next step is to include these in integrated farm planning.



# IMPROVE ON-FARM PRODUCTIVITY

## OUR OBJECTIVES

Improve on-farm productivity, making venison production a more competitive land use. This will be demonstrated through:

- greater farmer confidence
- increased hind numbers

## THE OUTCOMES

### Partly achieved overall

Productivity improvements were built on three key pillars (see below):

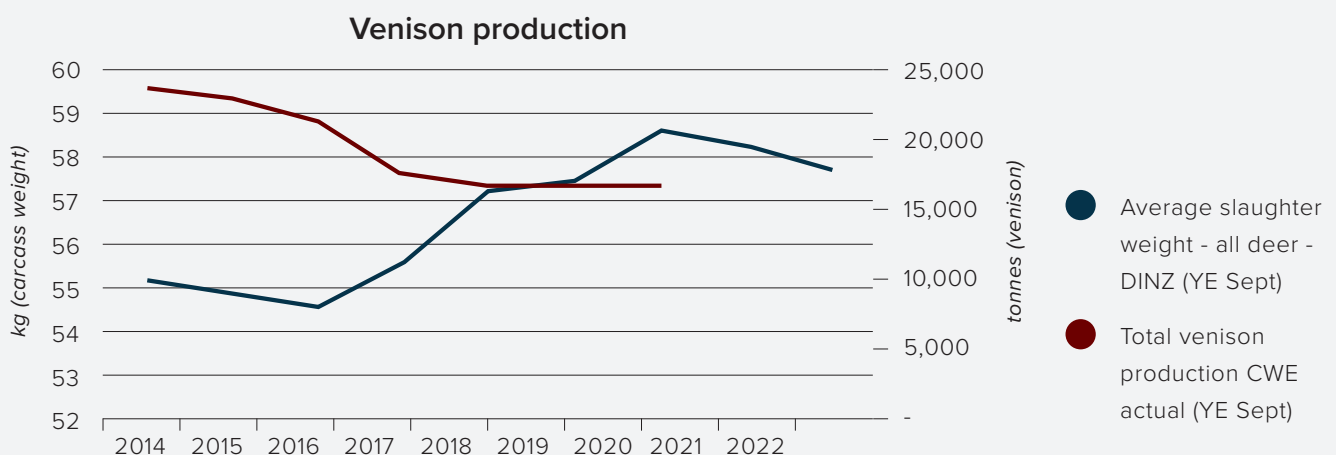
- **Nutrition**
- **Animal health**
- **Genetics**

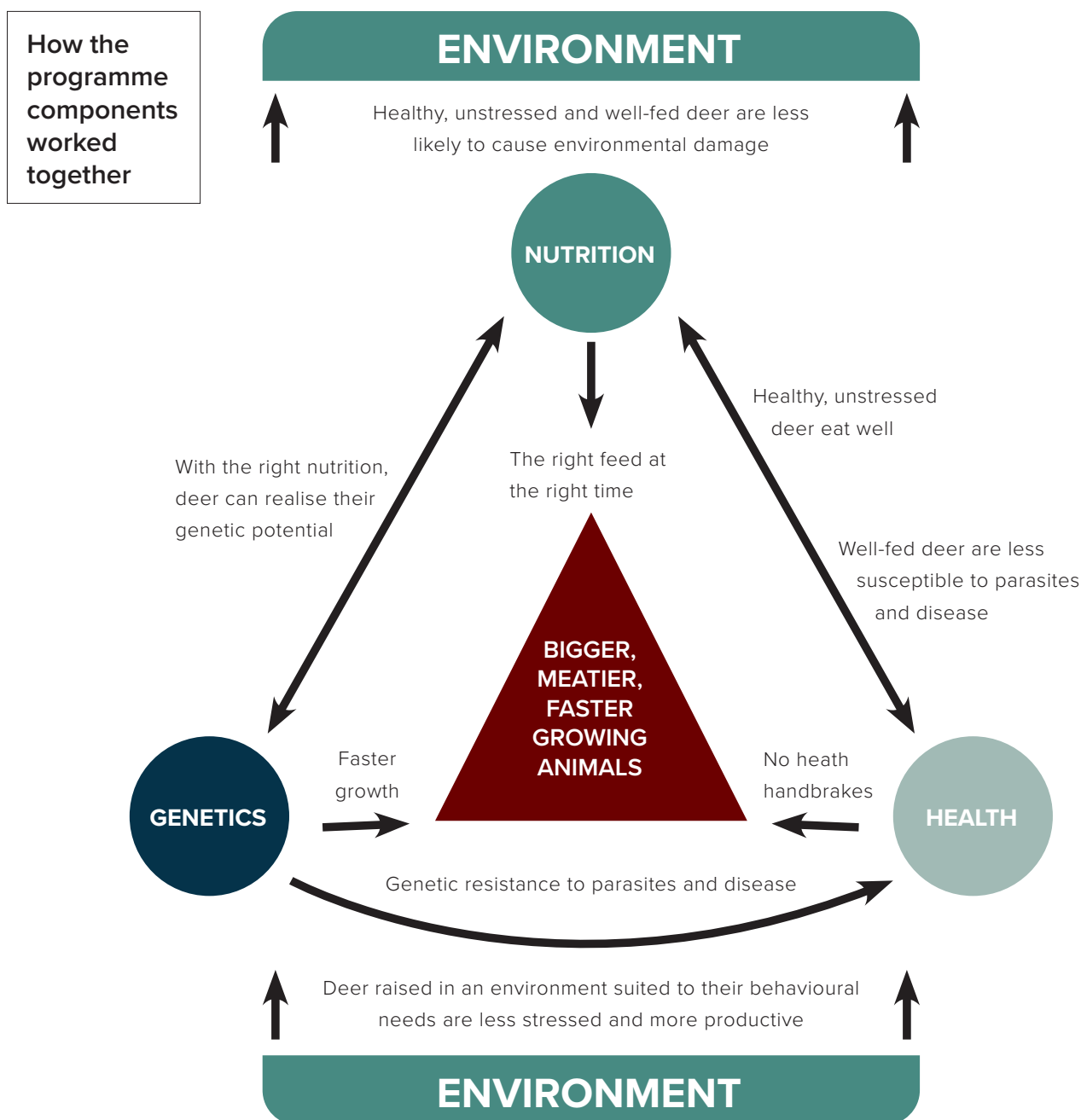
A fourth focus for action, **Environmental Outcomes**, was added to the programme in 2018. Improved environmental performance is closely linked to productivity improvements (see below).

## HOW IT PLAYED OUT

Through a combination of better nutrition, genetic gains and closer attention to animal health, impressive productivity gains were made. Healthier, meatier animals are being produced earlier, more in line with market demands.

- But several external factors undermined some of this progress:
  - » a steep drop in venison prices caused by the Covid-19 pandemic
  - » competition from other more profitable livestock enterprises including lamb and deer velvet .
- As a result, promising hind number trends early in the programme were reversed.





## THE OUTCOMES - NUTRITION

### Achieved

Expert P2P group advised on development of feed-related information resources (Deer Facts, body condition scoring etc.). This work has been influential in changing deer feeding practices.

## HOW IT PLAYED OUT

More than one-third of AP members highlighted improvements to the quality and quantity of their deer feeding as the most useful change they'd made after joining a group.



*Improve on-farm productivity (continued)*

## THE OUTCOMES - ANIMAL HEALTH FOCUS

### Partly achieved

---

Farmers were encouraged to develop deer health plans in partnership with their vets, to drive improvements in health and productivity. They were to be based on Deer Animal Health Reviews (DAHR) developed as part of the P2P programme.

Getting uptake of formal Deer Animal Health Reviews was difficult and it was not easy to get both farmers and veterinarians motivated to undertake the process.

### HOW IT PLAYED OUT

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In 2018, 3 years into this initiative, only a small percentage of deer farmers had booked or completed a formal DAHR.

However, the 2022 CINTA survey revealed that 70% of deer farmers had an animal health plan for their deer and, among people in APs or Environment Groups, the figure was 82%. This shows awareness of animal health planning has been boosted through this programme.

Knowledge of key animal health issues has improved through extension materials such as Deer Facts, while understanding of the links between productivity, health/welfare and reducing stressors has also grown.

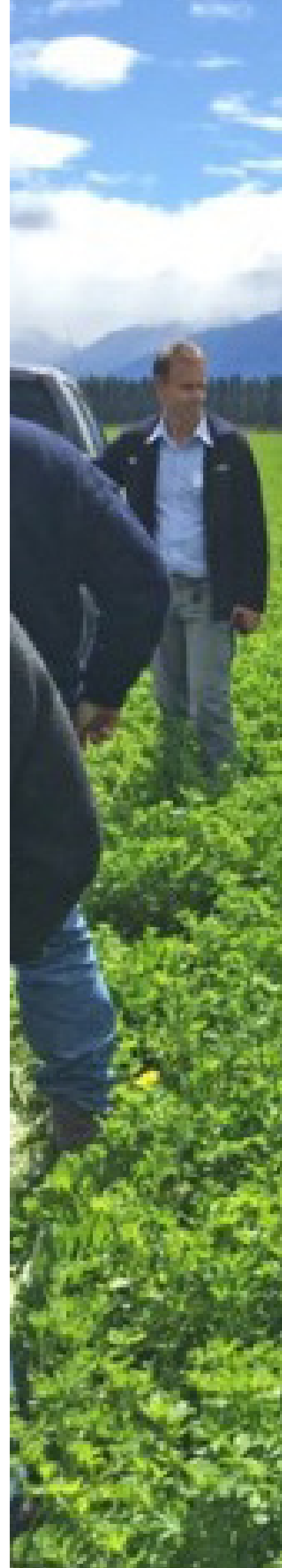
## THE OUTCOMES - GENETICS FOCUS

### Partially achieved

---

A major objective was to encourage greater use of estimated breeding values (eBVs) when selecting sires, to help drive permanent genetic gain in breeding herds.

- An offering of a **genetics refresher course** for farmers, vets, stock agents and consultants in 2016 wasn't well supported so this approach was discontinued.
- A hinds to terminal sire **mate allocation calculator** was developed and went live in late 2017. Although clearly useful, uptake was disappointing.
- About one-third of Advance Party members were still not using eBVs when **choosing stags**, indicating more needs to be done to promote their use.





*Fifty-five percent of Advance Party members surveyed in 2016 had changed their feeding practices as a result of joining an AP.*

*Improve on-farm productivity (continued)***HOW IT PLAYED OUT**

Although some specific initiatives weren't well supported (see left), the value of eBVs and genetic improvement was strongly promoted throughout the programme, with positive signs that the value of genetic selection is gaining traction among both buyers and sellers of breeding animals. The industry's ongoing genetics programme, Deer Select, provided a valuable cornerstone for Passion2Profit. Genetic improvement was promoted through:

- The Deer Select manager running numerous farmer presentations and workshops throughout NZ and online
- Farmer case studies showing successful use of eBVs published as articles and videos (575 video views)
- Extensive podcast and video series "Keen on Genes" published (cumulative 495 video views; 503 podcast downloads)
- Animated video promoting eBV use published (445 views)

Deer studs made increasing use of eBVs to promote high genetic merit sires, with many publishing eBVs in catalogues and sale prices reflecting known genetic worth.

Positive indicators included:

- The proportion of deer breeders using eBVs for stag selection increased from 36% in 2011 to 49% in 2017.
- Average carcass weights during the high-value chilled season rose by about 2kg during the P2P programme, much of this due to genetic improvement.



*A still from the series "Keen on Genes", produced to promote understanding and uptake of breeding values when choosing sires.*



# Connemara Wapiti

VENISON VELVET TEMPERAMENT

## 10th and final Annual Sire Bull Auction

### Connemara 2021 Sale Bulls

| Tag                 | Sire   | Growth | Meat            | Index    | CARLA           | Velvet      |     |      |           | Breed |
|---------------------|--------|--------|-----------------|----------|-----------------|-------------|-----|------|-----------|-------|
|                     |        | W12eBV | EMAcBV          | Terminal | CARLARBV        | MVWeBV      | 2Yr | 3Yr  | 3Yr Grade | Elk   |
| 119/17              | HOHEPA | 18.70  | 0.28            | \$ 33.48 | 108.14          | 1.77        | 5.8 | 7.3  | SA        | 76 %  |
| 112/17              | HOHEPA | 15.69  | -0.20           | \$ 30.03 | 84.01           | 1.77        | 3.7 | 7.3  | SA        | 76 %  |
| 117/17              | HOHEPA | 14.16  | 1.74            | \$ 29.74 | 45.01           | 1.85        | 3.5 | 2.3  | SA        | 75 %  |
| 337/17              | L4/11  | 16.10  | -0.62           | \$ 27.43 | -13.48          | 1.57        | 3.1 | 5.5  | SA        | 78 %  |
| 130/17              | HOHEPA | 17.05  | 0.41            | \$ 27.33 | 129.79          | 1.54        | n/a | n/a  | n/a       | 73 %  |
| 138/17              | HOHEPA | 15.82  | 0.79            | \$ 27.22 | 107.98          | 1.92        | 4.5 | 6.4  | SA        | 78 %  |
| 104/17              | HOHEPA | 17.47  | 1.45            | \$ 26.10 | 80.18           | 1.41        | 5.3 | 7.0  | SA        | 77 %  |
| 102/17              | HOHEPA | 13.68  | 0.67            | \$ 25.81 | 32.16           | 1.80        | 4.3 | 5.6  | SA        | 82 %  |
| 341/17              | L4/11  | 14.72  | -0.39           | \$ 24.72 | 36.26           | 1.88        | 3.0 | 5.0  | A         | 81 %  |
| 377/17              | L4/11  | 15.69  | -0.37           | \$ 24.55 | -17.35          | 1.53        | 5.1 | 6.5  | SA        | 70 %  |
| 136/17              | HOHEPA | 14.38  | 0.86            | \$ 24.17 | 45.67           | 1.19        | 5.3 | 10.7 | EWSS      | 73 %  |
| 201/17              | 63/10  | 16.66  | -0.71           | \$ 24.04 | -42.48          | 0.64        | n/a | 5.3  | SA        | 83 %  |
| 186/17              | TURBO  | 10.67  | 2.92            | \$ 24.01 | 52.32           | 1.28        | 3.2 | 4.4  | SA        | 76 %  |
| 196/17              | TURBO  | 12.37  | 1.62            | \$ 23.86 | 83.28           | 1.50        | 2.3 | 4.7  | SA        | 66 %  |
| 184/17              | TURBO  | 14.88  | 2.03            | \$ 23.85 | 53.30           | 1.52        | 5.3 | 7.1  | SA        | 80 %  |
| 116/17              | HOHEPA | 12.77  | 1.32            | \$ 23.65 | 67.11           | 1.46        | 4.2 | 9.6  | EWSS      | 75 %  |
| 394/17              | TURBO  | 16.52  | 2.09            | \$ 23.50 | 8.97            | 2.95        | 4.2 | 5.9  | SA        | 84 %  |
| 314/17              | 700/08 | 13.39  | -0.23           | \$ 23.03 | 19.79           | 0.61        | 2.9 | 4.8  | SA        | 71 %  |
| 320/17              | L4/11  | 12.71  | -0.38           | \$ 22.46 | -4.51           | 1.45        | 4.2 | 6.5  | SA        | 65 %  |
| 107/17              | HOHEPA | 11.55  | 0.08            | \$ 22.32 | 166.76          | 1.60        | 3.4 | 6.0  | SA        | 77 %  |
| 226/17              | 021/12 | 13.90  | -0.55           | \$ 21.86 | -20.31          | 1.73        | 3.3 | 6.1  | SA        | 73 %  |
| 392/17              | TURBO  | 11.93  | 2.04            | \$ 21.45 | 35.74           | 2.36        | 3.6 | 4.7  | SA        | 81 %  |
| 171/17              | TURBO  | 11.80  | 2.27            | \$ 21.37 | 72.85           | 1.51        | 3.4 | 4.3  | A         | 71 %  |
| 106/17              | HOHEPA | 11.63  | 0.89            | \$ 20.84 | 103.43          | 1.41        | 6.2 | 11.9 | EWSS      | 74 %  |
| 373/17              | 955/14 | 15.47  | 1.15            | \$ 20.64 | -9.86           | 0.92        | 3.2 | 4.6  | A         | 77 %  |
| 292/17              | 700/08 | 13.33  | -0.24           | \$ 20.56 | 2.81            | 0.46        | 3.7 | 5.8  | A         | 81 %  |
| 113/17              | HOHEPA | 10.46  | 0.99            | \$ 20.46 | 49.29           | 1.41        | 4.6 | 6.6  | SA        | 72 %  |
| 174/17              | TURBO  | 10.78  | 1.47            | \$ 20.43 | 72.85           | 1.47        | 3.2 | 5.0  | SA        | 76 %  |
| 137/17              | HOHEPA | 6.81   | 0.66            | \$ 15.71 | 89.84           | 1.32        | 3.6 | n/a  | n/a       | 77 %  |
|                     |        | Kg     | cm <sup>2</sup> | \$/Hind  | Immune Response | Velvet      | Kg  | Kg   | Grade     | Elk   |
| Wapiti Across Herds |        |        |                 |          |                 | Within Herd |     |      |           |       |

#### Genetic Merit Key:

|                             |        |         |         |         |
|-----------------------------|--------|---------|---------|---------|
| Wapiti Across Herds         | Top 2% | Top 10% | Top 25% | Top 50% |
| Within Connemara Sale Stags | Top 2% | Top 10% | Top 25% | Top 50% |

Don't miss this unique opportunity to tap into some excellent genetics!

## Case study 4:

# TEAMWORK YIELDS SOLUTIONS FOR GROUP

## Programme highlights

- Nutrition focus for R2 hinds has contributed to a 5% improvement in reproductive performance.
- Teamwork and support from P2P Advance Party helped farmer through a tough period following damaging floods.
- Use of fescue following winter crop has helped plug an important feed gap, a lesson shared through the wider group.
- Late-fawning hinds targeted for culling, improving herd efficiency.

## Farm summary: 2021

|                                         |                                                                                               |
|-----------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Location</b>                         | Mid Canterbury, near Sheffield                                                                |
| <b>Area (eff.)</b>                      | 380 ha                                                                                        |
| <b>Deer fenced</b>                      | 370 ha                                                                                        |
| <b>Landscape</b>                        | Flat to rolling                                                                               |
| <b>Water</b>                            | 7 ha irrigated; permanent river, ephemeral streams, spring-fed streams, water races and ponds |
| <b>Climate</b>                          | 900mm/year rainfall; summer safe and tending summer dry                                       |
| <b>Soils</b>                            | Six soil types over both blocks ranging from silt loams to heavy clays and iron pan           |
| <b>Total breeding hinds (incl R2)</b>   | ~1000                                                                                         |
| <b>Total stags velvetted (all ages)</b> | 680                                                                                           |
| <b>Cattle</b>                           | 100                                                                                           |

## Changes: 2013–2021

|                       | 2013             | 2021             | % change    |
|-----------------------|------------------|------------------|-------------|
| Trading income (deer) | \$233,276        | \$254,626        | +9%         |
| Velvet income         | \$3,967          | \$319,985        | +7,966%     |
| Trading income cattle | \$42,282         | \$36,606         | -13%        |
| Dairy grazing         | \$143,696        |                  | -100%       |
| Cash crops            | \$147,377        | \$24,417         | -83%        |
| <b>Total</b>          | <b>\$570,598</b> | <b>\$635,634</b> | <b>+11%</b> |



|               |     |     |         |
|---------------|-----|-----|---------|
| % from deer   | 42% | 90% | +117%   |
| % from velvet | 1%  | 50% | +7,141% |
| % from cattle | 7%  | 6%  | -22%    |
| % grazing     | 25% | 0%  | -100%   |
| % from crops  | 26% | 4%  | -85%    |

## Commentary

This farm is part of a larger family farm split up between four siblings, who work as a team. Since 2016 there has been a shift away from dairy grazing and crops to a stronger focus on deer. Within the deer there has been a swing towards more velvet production, which now contributes 50% of farm income.

Hinds are mated to velvet sires only, providing stags for the brothers' farms and the home farm. Surplus hinds, both young and mixed aged are sold to other farms as terminal breeding hinds or as milking hinds. Only cull hinds are sold for venison.

The farm was severely affected by the Canterbury floods in May 2021, which damaged infrastructure and pastures and dumped hundreds of tonnes of rock in waterways and on pastures.

Membership of the P2P Advance Party proved invaluable when the farmer's mental health was impacted in the aftermath of the flooding. Members stepped in the help with planning and provide practical help including fence repairs and off-farm grazing.

Increased awareness, through the P2P Advance Party, of the importance of getting first fawners to target weights before going to the stag, helped drive a 5% improvement

in scanning percentages from 2016 to 2021. Over the same period weaning percentage improved by 14%, while fawn losses between scanning and weaning fell 47%.

A successful innovation shared by the farmer with the rest of his P2P Advance Party was use of a magnesium supplement when drenching fawns at weaning. This helped reduce stress and calm the weaners.

A lesson from the rest of the group has been greater use of fescue to plug a feed gap in spring. Hinds and stags are break fed on swedes over winter, supplemented with straw or lucerne baleage. Because fescue grows early in spring, stock can come off the crop onto the grass, providing a boost for velvetting stags as antlers start growing.

The whole P2P Advance Party has also learned from one member of the value of getting wintering set up earlier, ideally in May.

Efficiency has been a buzzword for the group and on this farm small tail-end weaners are matched to their dams which are then culled to reduce the amount of late fawning.

P2P P2P Advance Party membership has also been invaluable for this farmer getting his Farm Environment Plan completed.



Velvetting stags now provide half the farm income on this property.



The property is crossed by a number of spring-fed streams.



## Marketing Premium Venison case study 3

# UNITED STATES

## THE UNITED STATES PRESENTS A LARGE, DIVERSE MARKET FOR VENISON WITH ITS OWN LOGISTICAL CHALLENGES BUT ALSO PLENTY OF POTENTIAL FOR GROWING VENISON CONSUMPTION, ESPECIALLY AT RETAIL.

There are already well-established channels in the United States for New Zealand venison to the foodservice sector but the potential for retail sales had not been fully explored. A Passion2Profit initiative, in partnership with four New Zealand venison exporters, made significant gains in this space, creating products suited to the tastes of protein-hungry Americans.

### Silver Fern Farms

The novelty of venison products provided Silver Fern Farms with a useful point of engagement with US food retailers, who categorise it alongside other “exotic” proteins such as bison, goat, boar and alligator. In stores where it is sold, venison quickly outpaced its rivals in the exotic category.

In 2021 the company had a presence in 850 US stores on the east and west coasts, with plans to grow that to 1500 outlets.

Ground venison is popular with US consumers but Silver Fern Farms began including medallions as well.

The growth in retail sales helped counterbalance the loss of foodservice business during the Covid-19-19 pandemic. Online retail was also introduced to maximise sales potential and supported the company’s strategy of making the product available to consumers through multiple channels.

### First Light

The company moved its operations in the United States to the West Coast and started to build its venison sales in the United States on the back of an already-successful Wagyu beef trade. The “grass-fed, niche and artisanal” label applied equally to both products.

First Light developed two venison products for the US market as part of the Passion2Profit initiative: a fine-ground venison “brick” and as a component of a three-meat pack of Italian-style meatballs. The company introduced to the United States a venison leg steak retail pack that includes a portion of Lewis Road butter for finishing the cooking, following its successful

introduction in New Zealand.

The one-pound venison brick gained strong popularity among shoppers in the Whole Foods retail chain as a quality, high-protein, lean alternative to conventional beef mince.

First Light’s meatball product also sold well, particularly through outlets offering cooked meatballs as a meal option in ready-to-eat meal serveries.

Promotion through Whole Foods’ website and high volumes of positive social media traffic helped boost sales.

Sales grew 45 percent for First Light’s venison brick since it was launched into 300 Whole Foods’ US stores in November 2021, helped by funds from the Passion2Profit Primary Growth Partnership programme.

(Sales data from the United States showed the industry as a whole has doubled its sales volumes through both the United States and China in April 2022, compared with a year previously.)



*First Light meatball retail pack launched along the West Coast United States.*

### Alliance

Premium and standard ground venison products provided an ideal entrée for venison into the US market for Alliance, as part of the Passion2Profit initiative. The company also

started marketing a venison loin grilling steak.

The ground product was frozen, which gave more flexibility in terms of logistics and delivery timing. The ground mince bricks were launched into two major retail chains on the East and West coasts, with a “5-pounder” brick aimed at foodservice.

Although starting from a small base, Alliance’s venison sales in the United States grew rapidly, reaching US\$1m in 2020, a 160 percent growth on the previous year. In 2021, first-quarter sales alone were 1.5 times the entire 2019 sales volume.

Alliance targeted the “conscious consumer” who looks for a higher-value product that has a lower environmental footprint.

While Covid-19 disrupted plans for promotion through in-store tastings, flexible support from Passion2Profit enabled a switch to re-focus activity onto the ground venison brick and the develop an interactive brochure launched through the Four Seasons brand, which is owned by Alliance’s part-owned US-based lamb marketer, The Lamb Company (TLC). The successful venison promotion leveraged off TLC’s strong connections with US buyers.



*Alliance Group’s retail brochure, developed with Passion2Profit funding, supported the co-operative’s activity in the US market, through The Lamb Company.*

## Mountain River Venison

A long relationship with US company Epic Provisions provided a channel for Mountain River venison to supply product for meat-based protein snacks.

Epic Provisions evolved through takeovers to become Force of Nature, whose marketing ethos around regenerative agriculture principles ties in well with the antibiotic free, grass-fed, free range production systems for New Zealand venison.

Mountain River supplies venison as a ground and steak medallion product, and a venison “Tomahawk” rib. The Tomahawk steak’s target market is affluent, educated consumers and its single-serve, five-ounce size is accessible and simple to cook.

The Passion2Profit funding enabled Mountain River to boost its partnership with Force of Nature and increase its promotion of venison products tailored to US tastes.

The company’s focus on niche US markets also includes working with foodservice and on-line high-end food retail company D’Artagnan. The New Jersey-based company was initially focused on foodservice products but pivoted to more consumer-focused on-line retail sales given Covid-19’s impact.

**INNOVATION 2021**

STRATEGIC & DISRUPTIVE product innovation adds variety, value and quality to our product portfolio while meeting the growing demands of our customers.

|                    |                                                                                                   |                     |                                                                                                                                                  |
|--------------------|---------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CORE GRINDS</b> | Incremental blends in the most convenient form to shop and cook                                   | <b>PREMIUM CUTS</b> | A wide variety of steaks and gourmet roasts and whole chicken for our culinary focused consumers                                                 |
| <b>VALUE ADD</b>   | Ready to eat, pre-seasoned items, and burger patties. Serving the consumer with additional value. | <b>WHOLE ANIMAL</b> | Honoring our ranchers’ work to raise the most ethically produced, healthy and quality protein on the market by offering unique nose to tail cuts |

(DESIGN IN PROGRESS - VENISON SAUSAGE)

(DESIGN IN PROGRESS - VENISON BREAKFAST SAUSAGE)

(designs in progress - subject to change) proprietary and confidential. FORCE OF NATURE

*Coming Soon!*

*Innovative venison products tailored to US consumer tastes through Force of Nature.*



# EXPERTISE DEVELOPMENT

## ► OUR OBJECTIVES

Expertise development: Identify farm consultants, veterinarians and other specialists with expertise in deer. Explore special training for rural professionals who work with deer farmers.

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## THE OUTCOMES

### Achieved

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**Professionals facilitated** 29 Advance Parties and 10 Deer Industry Environment Groups. This involvement helped build their deer expertise and the programme invested heavily in ongoing training and development.

**Rural Professionals (RP) Workshops** were highly successful and often oversubscribed.

An annual **Big Deer Tour** for eight final-year university undergraduates with an interest in deer farming was organised from 2016.

A **Future Deer Farmers Tour** for eight ITO-enrolled students has been run since 2018.

**Final year veterinary students** were taken on a week-long programme each year to familiarise them with the animals and the industry.

*“The tour was an awesome opportunity and we got to observe so much. Everything was useful and we got to see the whole story of pasture to plate. I would recommend this tour to all students.”*

– Amy Ashworth, Big Deer Tourist, 2021



Big Deer Tour participants, 2021.



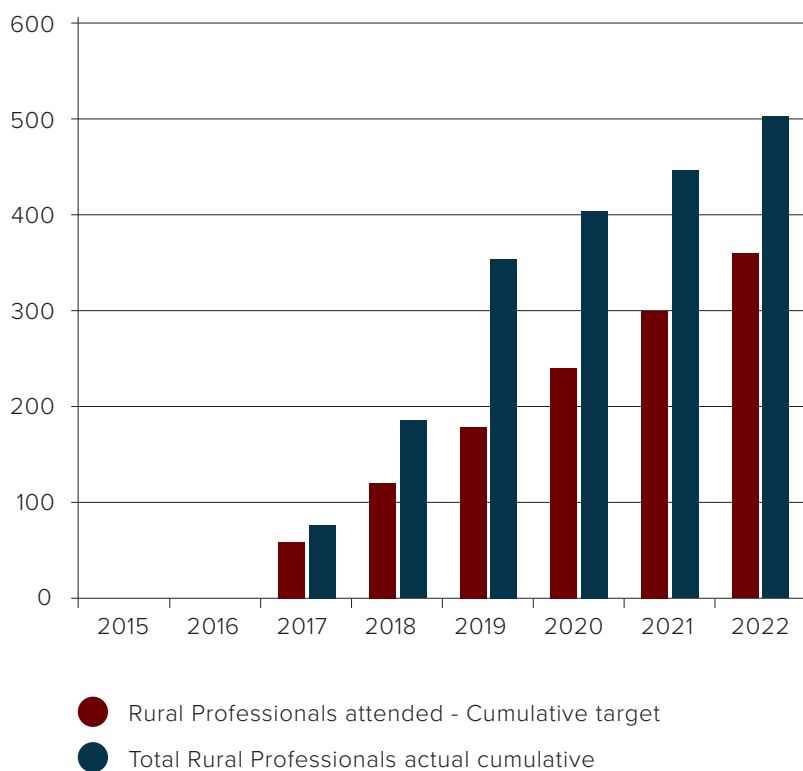
## HOW IT PLAYED OUT

Over 500 RPs attended P2P workshops on a variety of deer management topics, exceeding targets (see graph).

A cohort of 38 future agricultural leaders experienced a unique view of the deer industry through the Big Deer Tour.

Places on all of these programmes were highly sought after and noted as “career defining” by former participants.

These tours give potential professionals and farmers a taste of what the industry has to offer. These are very popular and greatly appreciated by those selected to participate.



*Attendance at Rural Professionals workshops regularly outstripped targets.*



*Final year veterinary students on a farm tour as part of a week-long P2P programme.*

# EXTENSION OUTREACH

## ► OUR OBJECTIVES

Extension outreach: Consider holding an annual research conference to help disseminate knowledge to farmers and those who advise them.

---

## THE OUTCOMES

### Achieved

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**Deer Farming Regional Workshops** encouraged production and environmental practice change among farmers not involved in Advance Parties. Single topic farmer meetings were convened by APs in collaboration with NZDFA branches.

**Tech Expos:** Annual Technical Conferences involving presentations and workshops on utilisation of technology and new management techniques have been well supported.

## HOW IT PLAYED OUT

---

Regional workshops are more effective than annual centralised conferences because they are more accessible and less costly for farmers to attend.

Facilitated workshops have become embedded in deer industry extension activity, resulting in better farmer engagement.



*Managing finishers on pastures, and dealing with pasture pests, were themes of a P2P Regional Workshop at Pāmu's Dawson Downs in 2016.*



# IMPROVE ENVIRONMENTAL OUTCOMES

## ► OUR OBJECTIVES

Improve environmental outcomes in line with customers' environmental expectations and to underpin the industry's freedom to operate.

## THE OUTCOMES

### Achieved

From 2017 **Deer Industry Environmental Groups** of farmers worked collectively on environmental management and completing their Farm Environment Plan (FEP).

## HOW IT PLAYED OUT

By the end of 2021, 15 groups involving more than 150 farmers were active.

As a result of this activity, an additional 200 deer farmers now have, and use, a Farm Environment Plan (FEP).

From 2017 to 2022, the percentage of farmers with an FEP grew from 5% to 43%. A further 20% have identified and are taking actions on their environmental risks (CINTA survey, 2022).

Participation in environmental groups and "Know Your Number" workshops have been promoted by DINZ as part of its support for the He Waka Eke Noa process.

*Farmers involved in Deer Industry Environmental Groups: 2022*



*Target 150*

*Actual 165*



*Extensive plantings at the Deer Farmers Environment Award-winning Forest Road Farm, Hawke's Bay.*



Case study 5:

# ESTABLISHED FAMILY FARM KEEPS LIFTING PERFORMANCE

## Programme highlights

- Successfully integrated deer enterprise with complementary velvet and venison production.
- Big gains made getting deer to killable weights earlier.
- Genetic improvement and selection has enabled a steady improvement in velvet weights in younger age cohorts.
- Reproductive performance improved, with special emphasis on productivity of first fawners.

## Farm summary: 2022

|                                         |                                                                      |
|-----------------------------------------|----------------------------------------------------------------------|
| <b>Location</b>                         | South Waikato                                                        |
| <b>Area (eff.)</b>                      | 625 ha                                                               |
| <b>Deer fenced</b>                      | 400 ha                                                               |
| <b>Landscape</b>                        | 170ha gentle–rolling, balance medium–steep hill                      |
| <b>Altitude</b>                         | Up to 200 m asl                                                      |
| <b>Climate</b>                          | 1,500 mm, can be summer dry                                          |
| <b>Pastures</b>                         | Ryegrass/clover                                                      |
| <b>Silage</b>                           | 500 ha cut for pit silage for self-feed system for hinds over winter |
| <b>Other supplements</b>                | 700 t palm kernel, 100 t dried distillers' grain, 40 t maize         |
| <b>Total breeding hinds (incl R2)</b>   | 1,417                                                                |
| <b>Total stags velvetted (all ages)</b> | 730                                                                  |
| <b>Other livestock</b>                  | Dairy heifers December–May (total 18 months); sheep for ragwort.     |

This well-established family farm and P2P Advance Party member has a mixed velvetting and venison operation, with one-third of hinds mated to velvet sires and two-thirds to terminal sires. Replacement hinds are bred on the farm.

The area has been subjected to bad droughts in recent years, putting pressure on stocking rates and supplementary feed.

The family have been concentrating on productivity improvement across both venison and velvet. While growth rates are not a priority for red deer bred for velvet,

this farm nonetheless achieved good gains, getting close to industry growth curves in recent years. For deer that are bred for venison, weights have been as much as 12 kg above industry growth curves by July, shortly before the chilled venison season begins.

They have made big gains getting venison animals to killable weights earlier (see Table 1). This means the animals spend less time on the farm and use less feed. While saving on feed costs, it also means the animals are killed closer to the peak schedule price period.

## Commentary

**Table 1: Average kill dates, 2015/16–2021/22**

|             | 2015/16    | 2021/22      | Improvement     |
|-------------|------------|--------------|-----------------|
| Young stags | 25 October | 28 September | 27 days earlier |
| Young hinds | 5 November | 23 October   | 13 days earlier |

For velvet production there have been big improvements in weights during the life of the P2P Advance Party. Use of superior genetics and culling based on velvet weights at 2 years has seen average velvet weights in younger deer increase by over 24% (see Table 2).

**Table 2: Velvet weight improvements, 2015/16–2021/22 seasons**

|                                                   | 2015/16 | 2021/22 | % change |
|---------------------------------------------------|---------|---------|----------|
| Average velvet weights of 2 year olds (first cut) | 2.73 kg | 3.4 kg  | +24.5%   |
| Average velvet weights of 4 year olds (first cut) | 5.8 kg  | 7.2 kg  | +24.1%   |

Reproductive performance (see Table 3) has been another focus for this farm, and there has been steady improvement across most indicators, especially for R2 hinds (first fawners). Conception rates for this group improved by 17% in 6 years (see Table 3). The P2P Advance Party group is looking harder at reasons behind low conception rates, getting the first fawners up to good weights before mating and choosing the right animals as replacements. The already-high conception rates in older hinds also continued to improve, while fawn wastage (losses between set stocking of pregnant hinds and weaning) was also reduced.

**Table 3: Reproductive performance improvements, 2017–2022**

|                                                   | 2017 | 2022 | % change |
|---------------------------------------------------|------|------|----------|
| R2 hinds conception rate                          | 67%  | 84%  | +17%     |
| Mixed age red hinds x red sire conception rate    | 93%  | 97%  | +4%      |
| Mixed age red hinds x wapiti sire conception rate | 90%  | 93%  | +3%      |
| Fawn wastage: mixed age hinds*                    | 12%  | 9%   | -3%      |
| Fawn wastage: R2 hinds*                           | 23%  | 11%  | -12%     |

\*Losses between set stocking of pregnant hinds and weaning

## 5. LOOKING AHEAD

Seven years is a long time in the life of such a young and dynamic sector as the deer industry. It has continued to evolve and adapt during that time. It has responded to external forces such as a changing regulatory environment and the disruptions caused by Covid-19, but the programme has also enabled it to take firmer control of its own destiny, throughout the value chain.

The partnership with the Government through Passion2Profit provided an ideal opportunity to start pursuing some of the objectives identified a decade earlier through the industry-driven Productivity Improvement Programme.

Not everything works. That is the nature of any ambitious programme to accelerate growth and change. But even in those cases there are positives. For example, while a programme to increase summer consumption of Cervena venison in Europe didn't achieve all of its aims, during the period of P2P, two other 'legs' for overseas markets grew and strengthened – in China and the United States. In addition to expanding those markets, the venison companies have found that they complement traditional European markets by placing more value on parts of the carcass not so highly valued in Europe and spreading demand over a longer period.

The collaboration between the five venison marketing companies grew during the period of the programme. Each is a relatively small player in world markets, but their collective experience is benefitting all of them, building confidence and market knowledge throughout the seven years.

This is likely to continue in the wake of P2P as international trading conditions for premium proteins like venison regain some normality and the companies consolidate the gains they made with the assistance of P2P funding.

For on-farm practice change to meet productivity and environmental goals, there has been a profound culture shift within the deer farming community through the life of the P2P programme. This is highlighted by the success of peer-to-peer learning through Advance Parties and Deer Industry Environmental Groups as a way to motivate uptake of new practices and technology at farm level.

Many of these groups are continuing beyond P2P, through a combination of self funding with some support from Deer Industry New Zealand. The positive benefits to farmer mental health and community resilience from the formation of these groups have been widespread and have provided a strong motivation for the groups to continue.

The Market-Led Production sub-programme also showed that other methods in addition to group learning are needed to cater for all needs. Other successful initiatives set to continue include:

- regional technical workshops
- hard copy information such as the *Deer Fact* series and Growth Curve charts
- online information and calculators
- workshops for rural professionals.

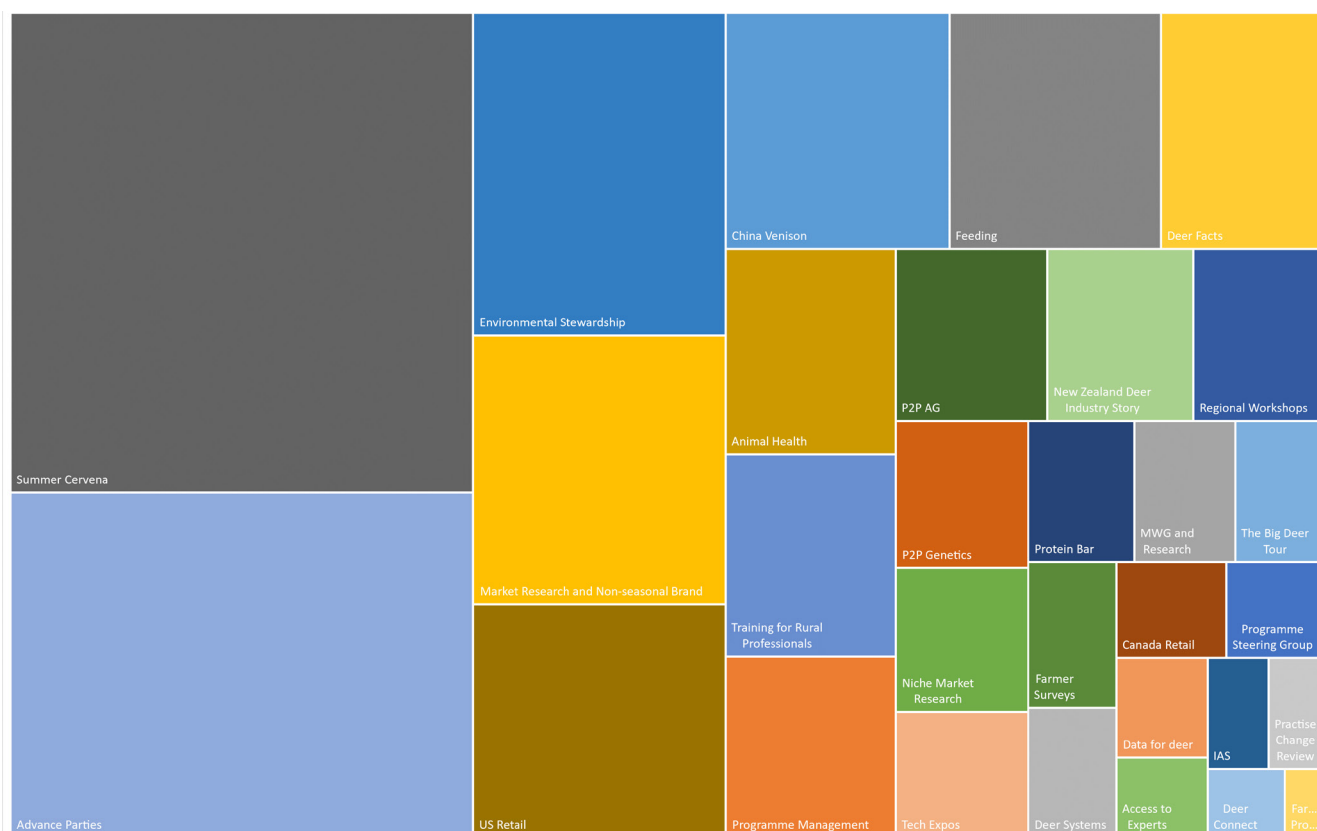
Webinars, developed partly in response to restrictions on face-to-face gatherings during Covid-19, also proved their worth and are likely to be retained as an option for practice change and learning.

The lessons from these various forms of engagement – feed deer better, manage their health, minimise stress, use breeding values to use genetics that match your farm system, and identify and manage environmental risks – received wider currency during the programme have raised the bar for a more productive and sustainable industry into the future.



## 6. FINANCIAL

### TOTAL P2P EXPENDITURE BY PROGRAMME



KPMG audited the P2P PGP in 2018 and was satisfied with the robustness and effectiveness of the co-investors' PGP financial management systems.

#### Total P2P programme expenditure by year

| Year             | 2014/15          | 2015/16            | 2016/17            | 2017/18            | 2018/19            | 2019/20            | 2020/21            | 2021/22            | Total:              |
|------------------|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
|                  | 1 July - 30 Sept | 1 Oct - 30 Sept    | 1 Oct - 30 Sept    | 1 Oct - 30 Sept    | 1 Oct - 30 Sept    | 1 Oct - 30 Sept    | 1 Oct - 30 Sept    | 1 Oct - 30 Sept    |                     |
| <b>DINZ Cash</b> | \$209,012        | \$694,347          | \$871,616          | \$952,493          | \$1,031,051        | \$587,447          | \$681,344          | \$775,362          | <b>\$5,802,672</b>  |
| <b>In kind</b>   | \$20,292         | \$191,653          | \$316,276          | \$239,002          | \$300,285          | \$298,094          | \$240,985          | \$245,606          | <b>\$1,852,193</b>  |
| <b>NZTE</b>      | \$0              | \$59,898           | \$36,982           | \$0                | \$0                | \$0                | \$0                | \$0                | <b>\$96,880</b>     |
| <b>MPI</b>       | \$229,304        | \$797,027          | \$949,655          | \$1,098,599        | \$1,239,351        | \$883,941          | \$853,886          | \$1,018,115        | <b>\$7,069,878</b>  |
| <b>TOTAL</b>     | <b>\$458,608</b> | <b>\$1,742,925</b> | <b>\$2,174,529</b> | <b>\$2,290,094</b> | <b>\$2,570,687</b> | <b>\$1,769,482</b> | <b>\$1,776,215</b> | <b>\$2,039,084</b> | <b>\$14,821,623</b> |

#### NOTES:

- Programme financial years ending 30 September
- A timeframe extension to the programme of 3 months was approved in February 2021, this due to implications of the Covid-19-19 pandemic.
- In kind contribution is for DINZ staff, farmer and other rural professional time
- NZTE – New Zealand Trade and Enterprise for in market costs

## Case study 6:

# RAPID INCREASE IN VELVET PRODUCTION EFFICIENCY

## Programme highlights

- Three-year-old velvet weights improved 42% over 5 years as a result of selection pressure and better genetics.
- Efficiency of velvet production in terms of dry matter consumed improved 44% in 5 years.
- Total velvet harvested doubled in five years while stag numbers grew just 14%.
- Share of income from sales of live velvet stags versus sales to the works grew from 4% to 53% over five seasons.
- Use of DNA parentage testing, reproductive technology and breeding values has accelerated genetic gains in this herd.
- Indoor wintering of weaner stags has enhanced their performance and antler development.

## Farm summary: 2022

|                                         |                                                                                               |
|-----------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Location</b>                         | Southland, near Otautau                                                                       |
| <b>Area (eff.)</b>                      | 485 ha                                                                                        |
| <b>Deer fenced</b>                      | 485 ha                                                                                        |
| <b>Landscape</b>                        | 1/3 rolling, 1/3 steep, 1/3 flat                                                              |
| <b>Altitude</b>                         | 90-272 m asl                                                                                  |
| <b>Climate</b>                          | District average 1670 mm rainfall, evenly spread                                              |
| <b>Pastures</b>                         | 5–8% pasture renewal rate with ryegrass/white clover.<br>About 50ha of old pastures remaining |
| <b>Red clover baleage</b>               | 1,190 bales made on farm                                                                      |
| <b>Other supplements</b>                | 40 t palm kernel, 20 t barley, 7 t peas                                                       |
| <b>Total breeding hinds (incl R2)</b>   | 1,223                                                                                         |
| <b>Total stags velvetted (all ages)</b> | 921                                                                                           |
| <b>Total velvet harvested</b>           | 6,833 kg                                                                                      |
| <b>Other livestock</b>                  | 290 ewes                                                                                      |

## Commentary

The farmer was inspired to join a P2P Advance Party as he was keen to learn more from peers in his area. Being in the group gave him the confidence to go ahead and try things he had only been thinking about.

There has been a considerable shift in focus and productivity indicators during the life of the AP.

Use of artificial insemination and embryo transfers to accelerate genetic improvement for velvet production was one change taken on with encouragement from the group. Using DNA parentage, progeny can be assessed from birth and the value of breeding hinds as velvet dams assessed much earlier than would be possible by waiting to assess performance of male progeny.

The farmer is now also using breeding values to determine which hinds are the best candidates to retain for mating.

Velvet weights across all age groups trended upwards over a five-year period, mainly as a result of genetic improvement (see graph below).

Total velvet efficiency improved over the same period.

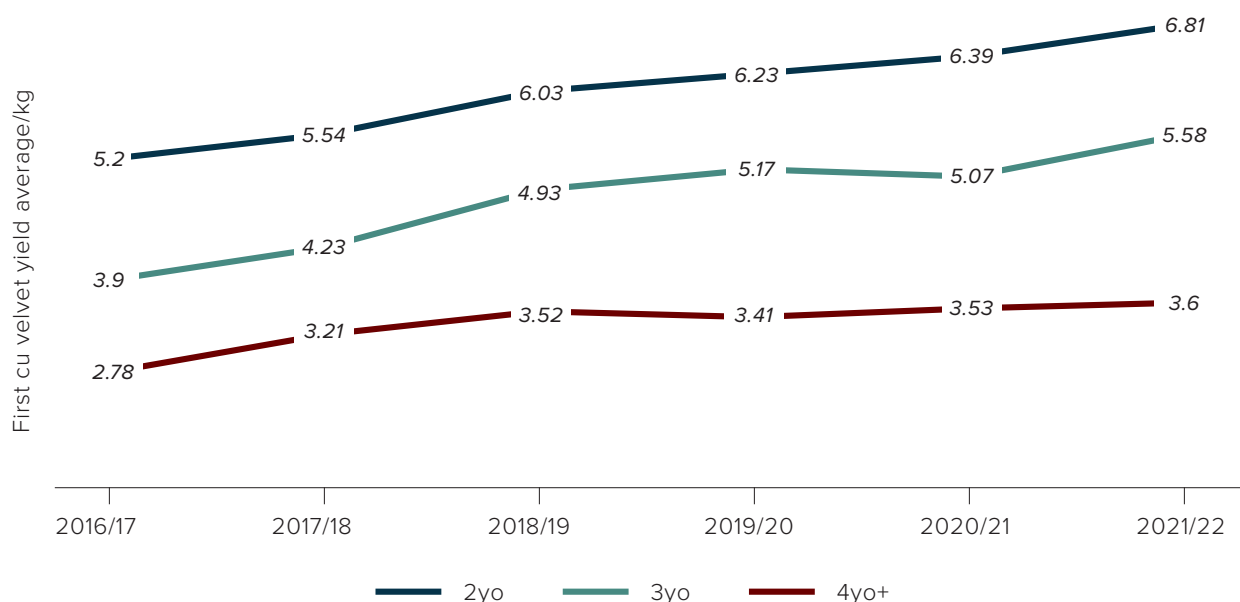
The velvet harvest doubled with an increase in stag numbers of just 14%. The amount of dry matter consumed per kg of velvet harvested plunged from 363 kg to 202 kg.

The income from venison fell steadily in the past 5 years, partly as a result of the falling schedule. This has been offset by a large increase in revenue from live sales of surplus velvetting stags to other velvet farmers.

Indoor wintering was started in 2020 and the farmer soon discovered benefits from keeping weaner stags indoors. This, in combination with better genetics, contributed to a 90% increase in velvet harvested from spikers, while the indoor weaner stags developed antlers earlier than those outdoors. The weaners were fed red clover baleage, peas and palm kernel during their 90 days indoors.

The farm's animal health plan was refined as a result of discussion with P2P Advance Party members. This has included a shift from using copper bullets to spraying copper onto pasture, modifying the drenching regime to give the best parasite control and giving a magnesium supplement at weaning.

Average first cut velvet weight for each age group of stags from 2016 to 2021





# 7. APPENDICES

## A. REFERENCES

- **Deer Facts:** 45 titles with practical, farmer-friendly information on Best Practice, Breeding, Biosecurity, Environment, Deer Handling, Animal Health, Nutrition and Management for Profit
- **Growth curve charts:** Printed and online versions of charts with target growth curves for either replacement breeding hinds or weaners being grown for venison. Tailored to different breeds and farm systems – farmers can add their own target weights and track progress.
- **Forage rotation planner/Paddock planner:** Wall charts to help plan pasture renewal and rotation for forage crops designed to fit different farm systems
- **Feed cost comparer:** Online tool to calculate best value options for bought in supplements to achieve production goals.
- **Feed intake calculator:** Online tool to calculate feed intake requirements for hinds, fawns and growing weaners.
- **Feed allocation calculator:** Online tool to calculate allocation for pasture, crops and supplements based on number and type of animals.
- **Keen on Genes:** Series of podcasts and videos explaining basic genetics, breeding values, the difference between maternal or terminal genetics, setting breeding objectives and meeting customer requirements
- **Environmental Management Handbook:** An online companion to the Deer Farmers Environmental Code of Practice. The handbook contains self-directed modules for farmers to work through, leading towards a completed Farm Environment Plan.
- **Tech Webinar Series:** Online presentations produced in 2020, covering Carla (selection for parasite resistance), deer genetics, environmental stewardship, deer reproduction, DeerPRO (monitoring health and weights of deer at slaughter), and antler production.
- **Deer Health Review Workbook:** An online or hard copy resource for farmers to use in conjunction with their veterinarian, identifying health risks and working out a reviewable plan for managing them.
- **Deer performance spreadsheets:** Templates for planning and monitoring performance, covering reproduction, venison finishing, velvet and replacement stock.
- **Deer production KPIs and benchmarking targets**
- **Financial analysis templates**
- **Events:**
  - » **The Big Deer Tour:** A top-to-bottom tour of all aspects of the NZ deer industry for tertiary students with an interest in working with the industry.
  - » **Regional workshops:** Technical workshops based around a particular topic (e.g. nutrition) done as a collaboration between P2P Advance Parties and their local deer farming community.
  - » **National technical workshops:** a combination of trade expo for new technologies such as remote sensing and workshop sessions covering topics such as planning for winter grazing.
  - » **Rural professionals workshops:** Two-day events for professionals who engage with the deer industry, e.g. bankers, local and central government, accountants, seed and fertiliser companies. These events give the professionals first-hand experience of the industry and better equips them to deal with deer farms in their everyday work.

## B. GLOSSARY

|                                               |                                                                                                                                                                                                                         |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Advance Parties</b>                        | Groups of about 8-10 farmers led by a professional facilitator with the objective of working together to help improve productivity and profitability on their farms through adoption of new practices and technologies. |
| <b>Deer Facts</b>                             | Series of short technical fact sheets on practical farm management topics                                                                                                                                               |
| <b>Deer Hub</b>                               | Section of the Deer Industry New Zealand website containing useful information for deer producers                                                                                                                       |
| <b>Deer Industry Environment Groups</b>       | Groups of about 8-10 farmers led by a professional facilitator with the objective of working together to help improve environmental outcomes and develop a Farm Environment Plan for each member                        |
| <b>Farm Assurance Programme/FAP</b>           | A national farm assurance programme developed for sheep, beef and deer farmers by the Red Meat Profit Partnership, streamlining audit systems into a single standard                                                    |
| <b>Fawn</b>                                   | Young deer, prior to weaning (also sometimes referred to as calves)                                                                                                                                                     |
| <b>Finishing</b>                              | Growing animals through to killable weights for venison production                                                                                                                                                      |
| <b>First fawners</b>                          | Female deer mated for the first time, usually about 16 months of age, and giving birth to their first fawn at about 2 years of age                                                                                      |
| <b>Foodservice</b>                            | The restaurant sector, including suppliers                                                                                                                                                                              |
| <b>Ground venison</b>                         | Venison mince                                                                                                                                                                                                           |
| <b>Growth curve</b>                           | Plot on graph showing target weights over time for young animals being grown as replacement hinds or for venison production                                                                                             |
| <b>Hind/Cow</b>                               | Female deer                                                                                                                                                                                                             |
| <b>Indoor wintering</b>                       | Practice of keeping some deer in sheds over the winter months, mainly to take pressure off pastures during wet weather and reduce sediment loss or soil damage                                                          |
| <b>Maternal sire</b>                          | A sire that is used for its genetic traits for breeding replacement hinds, e.g. hinds that conceive early.                                                                                                              |
| <b>NZDFA</b>                                  | New Zealand Deer Farmers' Association, a voluntary membership organisation                                                                                                                                              |
| <b>Passion2Profit/P2P</b>                     | The Primary Growth Partnership between the deer industry and the Government through the Ministry for Primary Industries Sustainable Food and Fibre Futures fund                                                         |
| <b>Primary Growth Partnership/PGP</b>         | A co-funded programme with equal input by industry sector groups and the NZ Government with the aim of improving productivity and profitability                                                                         |
| <b>Productivity Improvement Programme/PIP</b> | A deer industry funded programme to improve productivity on farms. This programme pre-dated Passion2Profit                                                                                                              |
| <b>QA</b>                                     | Quality Assurance                                                                                                                                                                                                       |
| <b>Scanning percentage</b>                    | Percentage of hinds that are put with the stag that become pregnant                                                                                                                                                     |
| <b>Stag/Bull</b>                              | Male deer                                                                                                                                                                                                               |
| <b>Stores</b>                                 | Animals that are bred on one property and sold to another farm where they will be raised for venison production                                                                                                         |
| <b>Summer safe</b>                            | Areas with reliable rainfall during summer months                                                                                                                                                                       |
| <b>Terminal sire</b>                          | A sire used for breeding animals intended for slaughter for venison production. Its progeny are not bred from                                                                                                           |
| <b>Velvet antler</b>                          | Antler that is still in its growth stage before it calcifies into hard antler. Antler is harvested at the velvet stage – male deer grow a new set of antlers every year                                                 |
| <b>Venison</b>                                | Deer meat                                                                                                                                                                                                               |
| <b>Wasteage</b>                               | Losses of fawns between the time of conception and weaning, e.g. through abortion or misadventure                                                                                                                       |
| <b>Weaner</b>                                 | Young deer from age of weaning (usually about 4 months) until about 1 year of age                                                                                                                                       |

## Case study 7:

# CONFIDENCE TO TRY NEW THINGS

## Programme highlights

- Successful shift in direction from breeding and finishing to more velvet production, better suiting local conditions.
- Contribution of deer to farm income is growing.
- Deer giving a high return per unit of feed consumed.
- AP membership and contact with other groups has given this farmer the inspiration and confidence to innovate, including use of drone technology, redesigning yard approach and installing a high-volume washdown system in the deer shed.
- Membership has also given this farmer increased confidence in his abilities and to try new things.

## Farm summary: 2021

|                                    |                                                                        |
|------------------------------------|------------------------------------------------------------------------|
| <b>Location</b>                    | Wairau Valley, Marlborough                                             |
| <b>Area (eff.)</b>                 | 1,363 ha                                                               |
| <b>Deer fenced</b>                 | 223 ha (39 ha being added)                                             |
| <b>Landscape</b>                   | Mainly hill, 95 ha of flats, 54 ha irrigated                           |
| <b>Altitude</b>                    | 260 m – 1,120 m                                                        |
| <b>Climate</b>                     | 1,100 mm rainfall; summer dry                                          |
| <b>Total deer</b>                  | 1,200 (including 500 hinds, 220 velvetting stags plus finishing stock) |
| <b>Other livestock/enterprises</b> | 85 cattle; 3,220 sheep; 85 beehives; 17 ha grapes                      |

## Changes: 2016–2021

|                                  | 2016            | 2021            | % change    |
|----------------------------------|-----------------|-----------------|-------------|
| Deer total stock units           | 1,604           | 2,273           | +42%        |
| Deer fenced area                 | 121 ha          | 223 ha          | +84%        |
| Total deer killed / total weight | 326 / 15,815 kg | 407 / 21,639 kg | +25% / +37% |
| Total income from venison        | \$112,755       | \$108,507       | -4%         |
| Total velvet production          | 250 kg          | 929 kg          | +272%       |
| Total income from velvet         | \$24,205        | \$121,050       | +400%       |



## Commentary

The contribution of deer to farm income has increased during the period that this farm has been a member of the local P2P Advance Party. (Sheep are still the mainstay, contributing about 60% of farm income.)

On the basis of income per stock unit or feed consumed, stags are the most profitable enterprise on this farm. For 2021 the gross return for stags was 35c/kg dry matter consumed – a figure likely to rise as per-animal production grows. This is more than double the return on dry matter consumed for sheep and wool.

It has been an uphill battle on the venison side, with increased weights and numbers of stock slaughtered being offset by lower venison prices during the Covid-19 disruptions. Velvet, however, is going from strength to strength with production approaching 1 tonne by 2021. Its contribution to farm income has risen from 5% to 14% and this is likely to grow further.

Since joining the P2P Advance Party, the farmer has been focusing on changing from a breeding and finishing deer operation to increasing velvet production. They have also been scaling back sheep.

The farmer estimates that major changes made recently have been 75% influenced by being part of the group. One such innovation was the introduction of drones for observation and also mustering deer on some of the difficult terrain which would otherwise be impractical for managing deer. This idea was picked up after a visit to a North Island AP where a drone was demonstrated.

In addition, attending a Waikato field day prompted installing a high volume wash-down system in the shed.

With the aim of increasing velvet stag numbers, having a decent wash-down system will allow saving in time and provide a more hygienic area for velvet harvesting.

In 2016, one of the farmer's goals was to double hind numbers but feedback from within the Advance Party led to a different course, with more emphasis being placed on increasing velvet stags rather than running more hinds. Young weaner stags are being bought in as replacement velvetting stock, rather than running more hinds to breed them on the farm.

Another good reason for shifting away from breeding and finishing deer towards velvet production is that the summer-dry farm's feed curves don't fit the demands of lactating hinds over the summer months when feed quality is poor. The needs of velvet stags are far better suited to the spring flush from August to November when antler is growing.

The best of the bought-in stags are being used to breed with existing hinds, with some specialist velvet hinds being also bought in to lift the genetics bar.

Before joining the Advance Party, the farmer had been having issues with deer not wanting to enter the yards from the main lead-in race. An AP day focused on ideas to improve animal flow. A range of good ideas were shared and the farmer opted for one of these: a curved race on the final entry to the yards. This modification has meant saved time and stress for both the farmer and the animals.

The farmer has highly valued the social support gained through membership of the AP, along with the confidence it has given him to make decisions and in his ability for farm deer well.



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