Deer Industry News

Spreading the word on productivity

> A Day in the Bay FOCUSED FARMING EVENT ON SUMMER AND WINTER FEEDING ATTRACTS STRONG FARMER INTEREST





Advance Party Workshop METHVEN GATHERING ENTHUSED BY SUCCESS STORIES FROM AP GROUPS THROUGHOUT NZ DEERSelect Decade LOOKING BACK ON ON TEN YEARS OF RECORDING GENETIC IMPROVEMENT

AUGUST/SEPTEMBER 2016

Deer Industry News

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

ISSUE 79 | AUGUST/SEPTEMBER 2016 ISSN 1176-0753

Contents

Editorial
On Farm A day in the Bay
Markets
Venison update 8 Cervena to Benelux: Trial update 10 Velvet update
General News
Third Annual "Top of the South" Velvet and Hard Antler competition Inaugural technology expo
Advance Parties Methven workshop creates a buzz 12 Methven Advance Party presentations 15
People
Obituary: Richard Riddiford
for Tony Pearse
DEERSelect: 10 years
You've come a long way, baby 23 System a "national iewel"
Research
Johne's Disease Research Consortium calls time
Animal Health Reviewing ten years of Johne's Management Ltd
Cover: Well-grown R2 hinds at Criffel Station. Getting R2s up to a good weight for their first

Getting R2s up to a good weight for their first mating was one of the topics tackled at the Hawke's Bay DFA's Focused Farming event earlier in August (see page 3). Photo: Tony Pearse.

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

Recording and monitoring make the difference

We jumped at the opportunity to be involved with the Deer Industry Focus Farm programme from 2011– 2014, just as we have jumped at the chance to be involved with P2P – and probably for the same reasons.



Sam Zino.

WE WERE ABLE to work with some of the best minds in the industry, such as farm consultant, Wayne Allan, AgResearch scientist David Stevens, DINZ Producer Manager Tony Pearse, and all the extremely knowledgeable farmers both young and old (I still classify myself as young but I feel that may be slipping away!).

The Focus Farm Programme allowed me to grow the deer side of the business while still learning. It gave me the confidence to make bold decisions such as redesigning my farming system to include 50 hectares of lucerne, self-feed silage pits for winter, and intensifying the finishing unit – all while making sure we were being sustainable both environmentally and economically.

The single biggest lesson from the Focus Farm programme for me has been the importance of recording and monitoring. If we want to know how our animals and pastures are growing we need to monitor them through the seasons to gain a clear understanding of how our system is performing. This will give us confidence to tweak the system or make adjustments as needed, for example, to fill the looming feed deficit (common here in North Canterbury for the past two years), or to see if finishing animals are growing at the desired rates to hit target weights for spring contracts.

Recording growth rates has become critical to decision making for the finishing unit. We have identified the opportunities, where we can gain further weight which means more dollars into the pocket. It identifies periods where animals are not performing as desired – a system fault that needs adjusting. And it allows us to maximise the good times.

Recording gives us confidence to maximise the spring contract numbers rather than being conservative. We can identify the animals that need to be pushed along to make the cut, and it allows us to prioritise feed to maximise our profits.

Monitoring our grass growth gave me the confidence to change the way we use our irrigation. By increasing the area of lucerne we have been able to reduce our water application rate by half and increase the irrigated area. This has a two-fold effect, providing high-quality feed through spring, summer and autumn, while growing more total feed on the same land area. Water is also available for boosting winter crops and fodder beet has become central to this. It allows us to grow a lot of feed in a confined area which also frees up more pasture for spring production when feed is at its cheapest.

Now we are embarking on the P2P programme and I am excited about it. We look forward to seeing some of you who are involved in the Next Generation programme in late August.

To the rest of you, good luck with the coming season. Let's all hope there are many good years to come (and the rain Gods look upon North Canterbury a little more kindly).

– Sam Zino, deer farmer, Hawarden

EDITOR Phil Stewart, Words & Pictures

EDITORIAL AND ADVERTISING ENQUIRIES Deer Industry News, PO Box 27-221, Wellington, Ph 04 384 4688, 021 620 399, email phil@wordpict.co.nz

CIRCULATION ENQUIRIES

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

A day in the Bay

by Phil Stewart, Deer Industry News Editor

A new model that's intended to help Advance Parties to connect with the wider deer farming community was given a good shakeout in Central Hawke's Bay on 2 August. The "Focused Farming" *Feeding Opportunities: winter and summer* workshop attracted an excellent turnout of around 80 to see winter cropping in action on two local farms before repairing to the Takapau Golf Club for a workshop on crops and ways to achieve growth targets.

JUDGING BY THE excellent attendance and the engagement of farmers in the discussions, this more targeted formula for extension could be the way of the future. The weather gods agreed, allowing a cool but still and pleasant day before the easterly storm that brought snow and heavy rain to Hawke's Bay a few days later.

Funding for the day was made available through AgResearch and DEEResearch and the event was ably hosted by the Hawke's Bay branch of NZDFA, with support from Silver Fern Farms and Firstlight.

Cost effective tucker at Jedburgh

FIRST STOP WAS a crop of Kestrel kale being grazed by hinds on Jedburgh Farm, the property of vets and deer farmers, Richard Hilson and Karen Middelberg.

The 220-hectare property near Takapau has 117 hectares deer fenced and this year is wintering 1452 deer stock units. The focus there is bodyweight and temperament first, and velvet second. It's all flat and on silt loams with 1015mm annual rainfall. It can get dry at times and grass grub is an issue.

Richard and Karen have been growing kale as a simple wintering system for their mixed-age hinds since 2009. After an early dalliance with Sovereign, they have stuck with Kestrel kale ever since. Hilson said it was cheap to grow and yields, with the exception of a bad year in 2014, had been pretty consistent. (Ideally it's about 12 tonnes/ha and they've been close to that most years.)



Hinds on kale at Jedburgh in 2010. Photo: Richard Hilson.

The crop we visited had yielded 11.3 tonnes/ha at a cost of just 5.8c/kg dry matter. Hilson said a 5ha crop of kale yields about 50 tonnes and costs \$3,750 to produce. The break needs shifting once a week and this can be done on a bike (although for "perfect" utilisation the breaks would be long and skinny and shifted daily).

By contrast, feeding the same amount in bales (at \$100/bale) would cost \$25,000 and need a tractor and feeder to feed out once a day.

This year's crop was sown in mid October 2015 following some run-out plantain. It's budgeted to last 86 days from mid June to early September for 220 hinds budgeted at 2.5kg/head.

The deer are used to the system and like it. Hilson said there is always a degree of waste but the hinds tick over nicely through the winter on the kale.

Hamish Best of PGG Wrightson, a "de facto member" of the Hawke's Bay Advance Party, told attendees the crop was holding up well. He said deer were keen on the stalk as much as the leaf and nipped off the top of the plant to get at the stalk first, before cleaning up the leaf later.



Hamish Best (left) and Richard Hilson. Photo: Phil Stewart

He said if the kale crop yields too heavily, the extra is mainly low-ME stalk, which can be a nuisance to get cleaned up and doesn't give any additional benefit.

When grazing the winter kale it's important to measure the crop yields and plan the breaks accordingly. Hilson said start and finish dates for crops should be planned, along with how this fits into your farm system for achieving certain weights at key dates.

Best said good planning was also needed for spraying, fertiliser, weed control and so on. "Plan your spraying out good and early – you don't want to rush it."

continued on page 4

Hawke's Bay Focused Farming: continued

It could be either direct drilled or cultivated and there were pros and cons with each. The light silt loams could end up on the neighbour's paddocks in some conditions, while slugs enjoyed the environment provided by direct drilling.

Insecticide could be applied at spraying out and seed treatment used for the next wave of insects. Hilson said *Nysius* fly and springtail were among the worst of the establishment pests. Greasy cutworm was another, especially attracted to warm exposed soil in spring. That said, sprays to control these pests were relatively cheap.

Best said there were no strict rules about running kale crops back to back, but up to seven years between crops would be best practice. "A break of two or three years would be better than none. Crops such as fodder beet, oats or a short rotation ryegrass would be OK in between." Hilson is planning to put in plantain after the current kale crop is finished. He said it costs about the same to establish as ryegrass.



R1 stags and lead hinds enjoying some good pasture at Jedburgh Farm. Photo: Phil Stewart.

Sovereign rules at Maranoa

OUR COVER FROM this time last year showed John and Marie Spiers' son Daniel wading through an impressive crop of Sovereign kale at Maranoa. The family farm on a fully deer fenced 307-hectare property just south of Takapau. This year they are wintering 3,291 deer stock units plus 724 stock units of R1 bulls.

John Spiers said they tried a crop of winter kale in two paddocks last year as part of the Hawke's Bay Originals Advance Party programme and they were pleased enough to repeat the exercise this year. He said taking all the mixed age animals onto crop takes pressure off the pasture and makes wintering their young stock much easier.



John (left) and Daniel Spiers. Photo: Phil Stewart.

Sovereign kale grows thicker stalks when the plant population is lower, and to get through it Daniel uses a kale cutter on the front of the quad, towing a post on a chain behind to create a decent channel for the break.

John and Daniel have found that achieving the ideal utilisation of 85 percent isn't realistic and a target of about 70 percent is more achievable. Hamish Best said the stags are going through the crop pretty quickly and trying to force them to utilise more of it will just hold them back.

As a result they were getting through the crop faster than anticipated. The 4.7kgDM/head/day budgeted for the bigger Eastern stags last year still wasn't enough and they have allowed 5kg this year. Even with that, the stags on one of the two crops were motoring through it. At day 42 of a budgeted 80 days they were already well into the third of four breaks, with the last one expected to be good for about 15 days in total. The mixed age hinds on the second paddock were also going well, although were showing signs of slowing down on the crop.



Mixed age stags at Maranoa are thriving on the kale crop and getting through it fast. Photo: Phil Stewart.

John Spiers said they used long, thin two-three-day breaks last year, but had to push the stags hard to clean up the residuals. They're slackening off the pressure somewhat this year.

Hamish Best commented that deer are "funny" animals when it comes to grazing crops and the hinds and stags tend to graze differently – the hinds favour stalk while stags go for the leaf first. These differences help explain why utilisation may not be so good on this variety. That said, they are still very pleased with the overall results.

This year's crop was drilled last October at a rate of 4kg of seed and 200kg DAP down the spout. Urea at 120kg/ha was applied just before Easter and was followed by timely rain.

John said the stalks were thicker where the crop had struck more sparsely, but thinner stems in the better areas were more palatable.

There is also a self-feed silage pit at Maranoa and hinds that use it properly do very well on it. At present the pit is not being used as it requires some structural work to better protect a nearby creek. (Maranoa has been through the Hawke's Bay regional Council's Plan Change 6 and is doing some work to mitigate runoff.)

Looking ahead, the business is signed up for the proposed Ruataniwha dam, which will bring irrigation via centre pivot to 60 hectares of the property.

For a useful DairyNZ fact sheet on growing kale: http://bit.ly/2aB2dMb

Benefits of summer crop ripple over whole farm

A CLASSIC SPLIT trial for summer grazing hinds and fawns on Karen and Michelle Middelberg's Clovelly farm near Waipukurau showed what a production boost you can get from feeding stock well during lactation – and how those benefits can spread into other areas of the farm.

Karen Middelberg told the workshop that getting weaning weights up had been a challenge on the summer-dry property, and stags had previously been carried through to R2s before they were ready for slaughter. They had made good gains using subdivision and strategic cattle grazing to improve pasture quality, with 89 percent of the R1 stags killed by 9 November last year as the farm moved into a yearling kill programme for the chilled trade. Beyond this, they looked at summer crops for further advantage.

After trying plantain they planted 8 hectares of Spitfire rape last October. It was initially intended for finishing lambs, but at the suggestion of Advance Party members at an on-farm meeting, they used the whole crop for summer grazing 200 hinds and fawns instead. The deer were put on the crop on 3 February, coming off on 29 February, just before weaning. The crop was block grazed with the paddock halved with temporary electrics initially. Another 200 hinds and fawns were put on grass, supplemented with silage.

The results were stunning (Table 1) and showed just what can be gained by getting good feed into hinds during late lactation.

Table 1: Clovelly weaning weights for stag and hind fawns, 2015 and 2016 (increase on 2015 weights in $\ensuremath{\text{red}}\xspace)$

From MA hinds	2015	2016 Grass/silage	2016 Crop
Stag fawns	51.9	55.5 <mark>+3.6</mark>	58.4 +6.5
Hind fawns	48.2	50.8 <mark>+2.6</mark>	53.9 +5.7

While the fawns that had been run on grass and silage showed an improvement on the previous season, their herdmates on the Spitfire rape really rocketed away, showing an average weaning weight advantage over the grass/silage group of 3kg.

Middelberg said that taking crop establishment costs of \$940/ hectare into account, a feed cost of 10.4c/kgDM, and consumption of 4.6kg/unit/day, the net advantage for the crop-fed group was \$1,100.

But that was far from the only advantage from using the crop.

"It gave us far more scope for the hinds that weren't on the crop. They were all in great condition for mating and out of 370 mixed age hinds that went to the stag, there were only eleven hinds mated after 20 April and just six empties."

This high conception rate (98.4 percent) will give more options for culling on late conception, hind age and temperament. The bigger weaners will also get a good head start going into the following spring.

The crop wasn't completely used up when the deer came off, so they were followed by 103 finishing lambs and the rape also provided winter ewe grazing.

While the figures used didn't factor in the cost of establishing grass after the crop was finished, the workshop agreed that this step is not a return to the status quo – new grass will help give much better weight gains than the older pasture that preceded the crop.

Summer Spitfire crop fits nicely into system

JUST BECAUSE YOUR place is hilly it doesn't mean you can't have cropping as part of the mix. Grant Charteris said the Forest Road Farm property he farms with wife Sally is all class 6 country but cropping has been used for the past 10 years.

He said summer cropping was originally seen as a means to get autumn pastures in good shape, but found it fitted into their system really well when they matched their stock classes to the feed surplus that was being produced. Yearling hinds fitted well



Kale and swede crop at Forest Road Farm. Photo: Phil Stewart.

Bromar supplementary lick feeders



Robust, ready made for immediate use, specifically designed for sheep ,cattle and deer.

Feeder holds 2 cubic metres

For further information contact P and S McCullough 03 615 7097 or 027 204 8850 mcculloughp@xtra.co.nz

continued on page 6

Hawke's Bay Focused Farming: continued



Visitors at the Feeding Opportunities workshop. Photo: Phil Stewart. and in December he now puts 220 of them onto Pasja that's been planted two and a half months earlier around 10 December, following kale and swedes. They get access to runoff pasture as the crop runs down.

He said being in the large mob gets the hinds well socialised and flushes them up well for the mating, realising their genetic potential. The figures certainly support that.

This year his R2 hinds grew from an average 95kg in January to 105kg at scanning in June, with 98 percent in fawn. Charteris keeps the best of the in-fawn R2s and sells the rest in fawn to other velvet producers. "Getting a \$200 premium over the schedule for 100 of these animals makes a huge difference to the bottom line," he said. "That shows how important it is to get that summer period right."

Dry autumns are another issue at Forest Road farm, and they picked up on what other Advance Party members had been doing – planting Spitfire rape in early November to help fill an earlyautumn deficit for hinds and fawns if needed. "We can then put on some urea and shut it up until we need it at the end of winter for the stags after they come off the kale and swedes, or for younger stags if it's not needed."

This year the R2 hinds went from Pasja onto the Spitfire rape for a couple of weeks before going onto saved pasture. The first fawner hinds and their fawns then went on there for about three weeks before mating to get them back up to a good weight. "The first mating is hard on a first fawner's reproduction cycle – this helps get them flushed up for their second mating. It's been a massive benefit."

By mid winter the mixed age stags went onto the Spitfire after they had got through their kale and swedes faster than anticipated. At 85 percent utilisation they were eating 8kg a day, Charteris said. "They can eat a lot more when it's put in front of them than we give them credit for."

Plot your pathway

JASON ARCHER OF AbacusBio leads the P2P Feeding Group and is spreading the word about using some planning to help achieve target weights, whether you're growing for the spring chilled venison season or a later summer kill.

He was heartened to see a good number of the visitors to the "Feeding Opportunities" workshops had recognised and kept the growth curves poster he'd developed and which had been posted out earlier this year to all deer farmers.

He explained that even at weaning there was a wide spread of weights within any mob, and these differences could persist. "That's why late lactation performance is so important," he said. "You can see the effects of genetics and feeding when growth is plotted on a chart."

Archer applied last year's growth figures from Clovelly Farm to the growth curves poster and was impressed to see that the yearlings had been "really smoking along" by spring with daily weight gains about 100g ahead of the spring kill target suggested on the growth curves poster.

"This property has been measured and monitored all the way along – we can see what's happening." Figures for 2016 so far painted a similar picture.

He was also impressed by the performance of the stag and hind fawns at Maranoa, adding that young pastures were performing very well.

He said that when finishers were setting target dates and weights for optimal returns, the saving in feed costs by getting animals away early should be factored into the equation. "But you can still do well growing slower to heavier weights – with the new contracts the schedule will stay higher for longer."

For further information: deernz.org/deer-growth-curves

R2 weights and pregnancy rates closely linked

AGRESEARCH'S GEOFF ASHER picked up on the growth theme, looking at the "vexing" issue of pregnancy rates in R2 hinds, which could be as high as the high 90s, but also crash out at 30-40 percent.

While it was well known that individual R2 hinds needed to be at least 70 percent of their mature weight at mating to reach puberty (often referred to as the "70% rule"), herd averages need to be more like 85–90 percent for herd conception rates to exceed 90 percent. The real issue was figuring out what that mature weight should be. Asher said this was down to genotype and it was a lot more complex than just one figure for reds and another for elk/wapiti.

The problem for most farmers is that they are not completely sure of the genotype of their breeding herds.

For sale: 93 first fawning red deer hinds

PD and weighed 14 July. Average L/W 99kg. Excellent capital stock. Lochmoigh Farms, Manawatu

MATTER AND ENCLOSED FOR THE AND

Phone 06 325-8795 Lochmoi@xtra.co.nz



Figure 1: Hind weight distribution and probability of pregnancy at 1 March

Asher said while actual genotypes weren't always known, "we do know what the average weights of the adult hinds in a herd are".

He said the growth rate chart for replacement females being developed by Jason Archer used a model allowing mature weights of 110kg (typical for pure English), 120kg (English: Eastern) and 130kg (pure Eastern). He had "ground truthed" the model using real data and it held up well.

He presented a graph developed by Jason Archer using real farm data Asher had collected over many years. It showed the relationship between the weight distribution of hinds in a herd and the probability of achieving pregnancy (Figure 1).

"Too many people have been using 90kg as a target for an R2's weight at mating. We're in a different era, folks – we have to be up over 100kg if we expect these hinds to perform."

The growth target chart for replacement females and soon to be on the DINZ website will help individuals plan target weights for their own R2s.

Gaining impact from the DPT

Watch this space for three afternoon workshops in conjunction with the Genetics P2P group. These will be held during October in, Gore, Ashburton and Napier – dates and programme to be advised very soon through DINZ. Join the conversation on what has been learned in the Deer Progeny Test and how to incorporate DPT findings into your breeding programmes.



Jason Archer added that it's best to get the weight onto yearling hinds as early as possible in case there is a difficult summer ahead.

Asher said there was big variation between farms in growth rates achieved in the first three months after weaning, anything from zero to 250g/day. This meant there were opportunities for some to go from low to high growth rates.



Venison update Production and exports

THE NATIONAL KILL for the 12 months ending June 2016 was 337,020, down 15.1% (Table 1).

Production for the 12 months ending June 2016 was 18,644 tonnes (carcass weight equivalent), down 13.8% year on year (Table 2).

The kill in June was down 25.9% versus the same period in 2015.

The total number of hinds killed in the 12 months to June 2016 was 177,174. Hind slaughter over the past 6 months is down 25%, which points positively long-term prospects that the herd is now in a rebuild phase.

The challenge our exporters face with these tight supply conditions is ensuring continuity of supply to current customers in order to limit disruption of restaurant menus and retail programmes while at the same time pressing on with new market exploration. It is pleasing to see positive results out of the United States with total venison and chilled volumes lifting during this period of tight supply.

Looking back on the calendar year, venison production levels are down 23% versus the first 6 months of 2015. This decrease, as expected, has affected total venison export figures. Total volume of venison exports for the 12 months ending June 2016 was down 8.6% (Table 3). Currency conditions meant value increased by 4.8%. It is good to see more venison being sold at chilled prices over the past 12 months. Chilled exports have grown by 4%, with value up by 16% or NZD \$8 million, making up 18% of total venison exports (Table 4).

Sales into the United States continue to perform positively. Over the past 12 months, volumes have steadily increased, with total volume up 13.5% and value up 25.9%. The market continues to exhibit sustained demand for items across the whole carcass. On the chilled export front, US exports are up 13% and 29% on value (Table 4). Germany is also showing a significant increase, with chilled volumes up 22%.

Table 1: Slaughter statistics	by month (deer numbers)
-------------------------------	-------------------------

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	% change
October	37,379	41,564	52,207	48,909	44,118	38,312	-13.2%
November	51,820	54,064	51,337	47,356	46,693	44,966	-3.7%
December	46,516	39,047	36,972	37,589	37,251	36,655	-1.6%
January	40,473	44,881	45,021	42,406	43,369	35,202	-18.8%
February	38,958	50,860	41,258	42,767	41,517	30,951	-25.5%
March	49,730	41,711	46,683	47,515	44,509	36,889	-17.1%
April	31,019	24,066	33,830	33,246	27,255	19,779	-27.4%
Мау	25,751	24,052	27,345	23,820	18,722	11,971	-36.1%
June	22,085	19,981	20,582	24,568	21,403	15,859	-25.9%
July	19,377	20,566	26,193	25,576	19,129		-25.2%
August	20,743	23,454	21,125	19,576	17,822		9.0%
September	30,661	22,535	28,436	27,064	29,485		9.0%
Year to Sept.	414,512	406,781	430,989	420,392	391,273		-6.9%
12 months to June	411,262	411,007	421,790	423,930	397,053	337,020	-15.1%
June	22,085	19,981	20,582	24,568	21,403	15,859	-25.9%

Third Annual "Top of the South" Velvet and Hard Antler competition

The NZDFA Canterbury West Coast Branch would like to thank the velvet growers from within our catchment for supporting our "Top of the South Velvet and Hard Antler" competition.

The 2016 competition awards and presentation dinner will be on Tuesday 6 December. This will include potential half-hour sessions on:

- velvet processing
- nutrition for growing velvet.

We will be running a "Junior Judging" class this year and

trialling a split mature red velvet class based on industry-agreed grading for traditional and non-traditional grades.

The "Top of the South" Velvet and Hard Antler Competition boundaries include the Nelson, Marlborough and Canterbury West Coast New Zealand Deer Farmers' Association branches, north of the Rangitata River to Cook Strait, including the East and West Coasts.

We wish you a productive velvet growing season and look forward to your participation in this year's competition. **Grant Hasse**, Committee Chair, "Top of the South" velvet and hard antler competition:

03-347-2234 or 027-224-5542, gandshasse@xtra.co.nz

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	% change
October	2,043	2,324	2,925	2,666	2,413	2,075	-14.0%
November	3,011	3,127	2,994	2,738	2,651	2,552	-3.7%
December	2,634	2,274	2,128	2,124	2,117	2,112	-0.2%
January	2,341	2,616	2,639	2,639	2,479	2,057	-17.0%
February	2,223	2,943	2,364	2,449	2,346	1,820	-22.4%
March	2,729	2,297	2,547	2,574	2,382	2,015	-15.4%
April	1,632	1,290	1,770	1,780	1,415	1,036	-26.8%
May	1,334	1,256	1,412	1,244	975	629	-35.5%
June	1,153	1,045	1,049	1,291	1,101	853	-22.5%
July	1,027	1,103	1,346	1,316	993		-24.5%
August	1,114	1,265	1,091	1,012	936		-7.4%
September	1,680	1,273	1,508	1,434	1,565		9.1%
Year to Sept.	22,920	22,812	23,773	23,266	21,373		-8.1%
12 months to June	22,732	22,992	23,469	23,450	21,641	18,644	-13.8%
June	1,153	1,045	1,049	1,291	1,101	853	-22.5%

Table 2: Production statistics by month (tonnes)

Table 3: Top 10 New Zealand venison export markets by volume and value - 12 months to June 2016

Market		Volume (mt)			(NZ\$FOB, m	illions)	Ave \$/kg		
	2015	2016 (p)	change	2015	2016 (p)	change	2015	2016 (p)	change
Germany	4,702	3,781	-19.59%	\$51.35	\$49.36	-3.88%	\$10.92	\$13.05	19.5%
United States	2,289	2,599	13.54%	\$23.07	\$29.04	25.88%	\$10.08	\$11.17	10.9%
Belgium	1,532	1,167	-23.83%	\$21.89	\$19.41	-11.33%	\$14.29	\$16.63	16.4%
UK	1,341	1,201	-10.44%	\$11.86	\$12.98	9.44%	\$8.84	\$10.81	22.2%
Finland	1,311	974	-25.71%	\$8.60	\$7.52	-12.56%	\$6.56	\$7.72	17.7%
Netherlands	1,155	860	-25.54%	\$19.20	\$18.77	-2.24%	\$16.62	\$21.83	31.3%
Switzerland	964	694	-28.01%	\$14.95	\$13.55	-9.36%	\$15.51	\$19.52	25.9%
Sweden	458	490	6.99%	\$3.98	\$5.25	31.91%	\$8.69	\$10.71	23.3%
Canada	372	413	11.02%	\$3.51	\$4.01	14.25%	\$9.44	\$9.71	2.9%
Other	1,435	2,039	42.09%	\$15.47	\$22.43	44.99%	\$10.78	\$11.00	2.04%
Total	15,559	14,218	-8.62%	\$173.88	\$182.32	4.85%	\$11.17	\$13.22	18.3%

Table 4: Top 10 New Zealand chilled venison export markets by volume and value – 12 months to June 2016

Market	Volume (mt)			Value	(NZ\$FOB, m	illions)	Ave \$/kg		
	2015	2016 (p)	change	2015	2016 (p)	change	2015	2016 (p)	change
United States	557	629	13%	\$11	\$14	29%	\$19.82	\$22.72	14.6%
Germany	460	563	22%	\$9	\$12	27%	\$20.30	\$21.05	3.7%
Belgium	4547	442	-3%	\$9	\$10	0%	\$20.88	\$22.60	8.2%
Netherlands	4054	435	7%	\$9	\$11	27%	\$21.53	\$25.52	18.5%
UK	200	132	-34%	\$2	\$2	-18%	\$12.40	\$15.38	24.0%
Switzerland	182	147	-19%	\$5	\$4	-10%	\$26.21	\$29.32	11.9%
France	104	127	22%	\$2	\$2	42%	\$16.54	\$19.29	16.6%
Canada	61	61	0%	\$1	\$1	-12%	\$22.62	\$19.84	-12.3%
Australia	15	14	-7%	\$0	\$0	0%	\$28.67	\$29.29	2.2%
Other	24	17	-29%	\$1	\$1	-18%	\$28.33	\$32.94	16.3%
Total	2,462	2,567	4%	\$50	\$58	16%	\$20.32	\$22.67	11.5%

continued on page 10

AUGUST/SEPTEMBER 2016 9

Cervena[®] to Europe: Trial update

DINZ Venison Marketing Manager, **Marianne Wilson**, has recently returned from Europe where she saw the P2P Cervena[®] venison trial in action in the Netherlands and Belgium. The trial involves venison exporters and DINZ working with in-market partners to develop and test new market opportunities outside the traditional game season.

NOW IN ITS second year in the Netherlands and its first year in Belgium, the trial's objective is to introduce the Cervena appellation as a promotional tool for increasing sales at chilled prices through the European spring and summer.

Alliance, Firstlight and Silver Fern Farms are participating in the trial with their respective importers (Bimpex, Kiplama and Luiten) and wholesalers (Metro, Hanos, Sligro and FoodImpuls).

Wilson met trial participants, visited stores and end users, and attended promotional events.

Metro has a long-standing partnership with Jeunes Restaurateurs (JRE) in Belgium, a network of young and upcoming chefs who are extremely active in the culinary scene. DINZ also has collaborated closely with the JRE network over the years and both of these relationships have helped open up opportunities to engage the JRE group of chefs to try Cervena and ultimately put it on their summer menus.

Steven Dehaeze, President of the JRE Belgium has been a champion for Cervena, and his influence has helped persuade a number of young up-and-coming Belgian culinary talent to experiment with Cervena.

Wilson found meeting with several JRE chefs who are working with Cervena for the

first time in Belgium very insightful.

"For chefs to try something that is seen as a foreign summer dining concept is not without risk. But the chefs I spoke with are enthusiastic about cooking with Cervena and trying out new menu ideas," she says.

She says chef Giovani Oosters, who owns and runs a restaurant in Belgium with a seasonal focus, was at first hesitant to try Cervena as a summer menu item. But he made the move

> after tasting the product and getting encouragement from colleagues who are also using Cervena.

"Once diners try it, they can't quite believe it's venison and are very curious to know more – we are really pleased with the feedback so far," he says.

The Cervena trial finished in mid-August and a full review of the results and activities will be undertaken by DINZ and venison exporters to understand areas for further refinement in year 3.

The Passion2Profit (P2P) strategy is a Primary Growth Partnership joint venture between DINZ and the Ministry for Primary Industries.

Venison market report: continued

Schedule

For the week commencing 25 July, the national published schedule was \$7.72/kg, compared with \$6.85/kg at the same time last year – an increase of 13% (Figure 1).

Strong demand and low stock levels are the main factors behind these higher than usual prices. Inventory of frozen venison stocks in the EU market were cleared in 2015 and this is also a factor in the higher prices we are seeing this year.

The New Zealand dollar has strengthened by 6% year on year versus the euro and US dollar. If this appreciation continues, it is likely to affect spring schedules.

The challenge from these higher prices is the widening price gap between venison and other proteins. Chefs have lower-priced alternatives to turn to, which deliver higher margins.



Figure 1: National published schedule: 55-60kg AP stag



President of JRE Belgium, Steven Dehaeze.

Velvet update

Planning for next season is well underway over this "quieter" period (for both velvet production and consumption), says DINZ Market Manager, Asia, **Rhys Griffiths**. The figures for last season are still not finalised, although current indications suggest a modest growth in velvet production to around 600 tonnes.

EXPORTS REACHED \$43M¹ – a first since the Asian Economic Crisis in 1997 and a 25 percent growth over the same period for the previous year. The growth has been led by increased direct exports to South Korea, with processed (dried) velvet exports doubling when compared with the same period for recent years.

While China remains (and will remain) the New
Zealand velvet industry's number one export market,
a significant proportion of what is exported to China
is processed and re-exported to Korea. This trend is
starting to change, however. The change is reported
to be mainly due to more New Zealand velvet being
retained and consumed in China. However, benefits
of tariff concessions from the New Zealand–Korea
free trade agreement are starting to have an effect on
incentivising more direct exports of processed velvet.FigureFurther, the increasing demand for quality New Zealand
velvet by large Korean healthy food companies has resulted in
some New Zealand velvet processors having the busiest season in
many years.\$20,00

New Zealand's velvet production coincides with the peak consumption of velvet in traditional markets. Exporters report little (if any) velvet stock remaining in New Zealand during the current hot mid-summer period in northern Asia – typically the period of lowest velvet consumption. This period is also the main time of northern hemisphere velvet production. At the time of writing, there were no pricing reports from the northern hemisphere. Production in these countries is reported to be holding at relatively stable levels.

During the "off-peak" season, it is a time to plan and prepare for the next season, which includes meeting new regulatory requirements. For New Zealand velvet's main consumption market of South Korea there has been a new listing requirement for all primary food products effective from 4 August 2016. New Zealand velvet exporters have had to individually register their export facilities on Korea's Ministry of Food and Drug Safety website. The Ministry for Primary Industries (MPI) was extremely helpful in guiding the industry through the registration process, and this has been complemented by the prompt reaction from the New Zealand velvet industry. MPI is aware of the importance of Korea as a market for New Zealand velvet – along with the timing of the new regulatory requirement.

There will also be some changes to regulatory requirements for velvet imported in to China. At the time of writing, no details were available, although DINZ understands there could be a high level visit by a delegation of Chinese officials to audit the velvet supply chain later this year. DINZ is working closely with MPI to understand what the new requirements could involve.



Figure 1: NZ\$ (FOB) velvet exports to major countries for year ending May 2014-2016

DINZ Board appointments

PADDY BOYD, CHAIR of the Selection and Appointments Panel (SAP), is pleased to advise that, from a high-quality field of six candidates nominated for the 2016–2019 three-year term, current DINZ Chair, Andy Macfarlane, has been returned.

He will be joined by Dr Ian Walker, Hawke's Bay as the other successful candidate for the DINZ Board.

Paddy thanks the nominees for the time and energy they dedicated to the process. It was one of the largest groups of nominees for the DINZ Board in many years and each gave an excellent interview. This made for a challenging process for the SAP, which carried out its interviews and deliberations on 27 and 28 June.

The first meeting of the 2016/17 DINZ Board was on 28 July.





Andy Macfarlane.

lan Walker.

¹ Statistics New Zealand figures for year ending May.

Methven workshop creates a buzz



by Phil Stewart, Deer Industry News Editor

About 65 Advance Party members plus facilitators and experts descended on Methven on 13–14 June for an intensive and well-planned workshop to share what they've been learning with the wider group.

THE ADVANCE PARTY philosophy is one of active rather than passive participation with all members committed to making changes and trying new things. That flowed through to the workshops where six groups of about 10 farmers talked over productivity issues such as winter feeding, reproduction and animal health. Rather than being talked at as a group, each member brought their own experiences and questions to the table, guided by a facilitator and with experts on hand to answer questions. The members swapped good practical advice, some of it new, some of it reinforcing good practice. The value that attendees got from the meeting was listening to others talk about their own challenges and the changes they had made.

These workshops were punctuated by presentations from members of nine of the current Advance Parties on the results of projects done within their groups. These were as diverse as the increased profit from feeding a deer supplement with fodder beet and baleage (+\$52.30 per deer over 100 days), to the uptake of new technology and genetics, to a "spray and pray" project (the prayer worked). See article on page 15 for a summary of the presentations.

To give an extra edge, a trophy was awarded for the best presentation and this was taken out by the "Hawke's Bay Originals" Advance Party for their work on winter cropping systems – effectively a large-scale trial that was so successful the group is repeating it this year.



Daniel Spiers (centre) representing the "Hawke's Bay Originals" Advance Party, holds the trophy awarded to the group for best presentation at the Methven workshop. From left are: Mark Forrester (North Canterbury), Matt Dalley (Central Regions), Dan Harper (Canterbury), Hamish Mackenzie (Mackenzie), Daniel Spiers (Hawke's Bay), Simone Hoskin (Hawke's Bay Fast Finishers), Gavin Sheath (P2P Advisory Group), Murray Hagen (Southland Elk/Wapiti), John Hamilton (partially obscured, Southland Elk/Wapiti), Adrian Moody (Wairarapa) and Justin Geary (South Canterbury/North Otago).

The event was meticulously planned and run by Advance Party coordinator, Pania Flint and P2P Project Coordinator, Rob Aloe, and the benefits of that showed through the wealth of good ideas and case studies that the group shared. Advance Parties are a central component of the P2P programme and are currently funded by Deer Industry New Zealand and MPI's Sustainable Farming Fund.

To take a look at the regional Advance Party presentations and notes from the workshop, visit: http://ap.org.nz/ nationalworkshop2016

Or simply read on for a *Deer Industry News* summary of the best bits.

Theme groups - what they were talking about

The following is a sampling of the advice farmers gave each other during the Methven workshops. This is not "official advice" or recommended best practice, but does give an insight into the issues that interest Advance Party members and how they are thinking about improving productivity on their own farms.

Winter feeding

- Feed budgeting with winter feeding/crops is vital know what balance of energy, protein and fibre the stock are getting.
- Take care when transitioning deer between feed sources.
- If you're using self-feed silage pads, set them up carefully to make sure not too much silage is trampled and wasted. Watch also that dominant hinds are not beating up smaller ones.
- All deer can tire of a crop over winter, especially as grass growth starts up in spring. One option is to have separate mobs on different crops and swap them over to help prevent boredom.
- Pasture quality makes a big difference to animal performance over winter don't expect run-out pastures to support good growth.
- Hinds can do well if run in a block of trees over winter with access to silage or baleage.
- Winter crops give pastures a rest and also help with parasite control.

Fodder beet

On the plus side:

- High yielding, making it a cheap feed
- Keeps well can be lifted and sold or fed elsewhere
- High energy

- Big window for feeding (e.g., can start early in autumn if needed)
- Easier to shift break fence than kale
- Suits deer and cattle; holds high stock numbers
- Takes pressure off other parts of farm
- Cleans up paddock for subsequent specialist crops
- Good break crop to slow down rotation
- Good to follow swedes/kale instead of double cropping. But...
- Needs other feeds to supplement it (runoff pasture, baleage etc)
- Deer can tire of it
- Crop failures are expensive
- Direct drilling possible but cultivation is recommended
- Growing two years in a row in the same paddock not recommended.

Early spring growth

- Early spring can be a pinch time on many farms as winter crops start to run out and pasture growth is still slow.
- Investigate the forage, grass, specialist crop and strategic bought-in feed options to help get you through this period and allow pasture growth to get underway.
- Getting weaner deer up to target weights and away early takes pressure off later in the season and creates opportunities for other stock classes.
- Feed budget and prioritise stock classes to take advantage of spring feed it's the cheapest of all to grow.
- Utilise different stock classes to maintain pasture quality.
- Identify the limiting factors and opportunities for your property (rainfall, altitude, environmental constraints, etc).

Early weaner finishing

- If you are buying in, pay close attention to the source and quality of your weaners.
- Give your supplier feedback on how their stock have performed.
- Take care with transition feed before and after weaning (e.g., ensure they have a full stomach going onto new feeds).
- Autumn growth rates are crucial. New pastures with good clover content and use of herbs like chicory and plantain can help with reaching targets.
- Spring growth is a challenge high ME, high protein, low-cost feed is needed from about mid August.
- Reserve the higher-cost feeds for when you're likely to get the biggest weight gain response.
- As a rule of thumb, get liveweights to 70kg by 1 June as a platform for reaching spring targets. The growth chart the deer industry put out is good for tracking weight.
- Mob size for weaners can be an issue, but up to 200 seems OK.

Reproductive success and fawn survival

- R2 hinds should be at least 85 percent of their mature weight by mating.
- Mating and fawning mobs need to be settled stress caused by disruption of social groupings can affect reproductive success.
- For mating mixed-age hinds, a stag ratio of between 1:30 and 1:40 is ideal. Anything over 1:40 carries a higher risk of failure. Mating ratios for first fawners should be much lower.

- Double scan if you suspect fetal wastage is an issue.
- First fawners should be fawned separately.
- Provide cover/long grass for fawning.
- If you're losing fawns, analyse performance paddock by paddock in case there are localised problems, e.g., fences not fawn proofed.
- Fetal ageing helps you sort out hinds into fawning groups, but don't put them in a situation where they're competing for places to fawn if they all drop within a short period.
- If reproductive performance is lacking, analyse where the problem is occurring: conception, fetal wastage, perinatal death, mismothering, or health issues between birth and weaning.



Avoid putting hinds into situations where they are competing for fawning space. Photo: Rhiannon McIntyre.

Feeding during lactation

- Feeding hinds and fawns well in the period before weaning has a double advantage: good weaning weights and better conditioned hinds for good reproductive performance.
- The better the feed available for fawns, the more pasture/forage they will consume and the quicker they will adapt from milk to becoming a ruminant.
- Try to maintain pasture quality during lactation, e.g. through topping or using cattle, increasing stocking rate and feeding supplements, starting rotations as early as possible and using late-flowering pasture species if suitable.
- Feeding higher costing supplements during late lactation can pay back financially as fawns have a high growth potential, while an earlier conception date will contribute to heavier weaner weights the following year.
- Work with your local fertiliser and seed reps to develop the best options to suit your environment and farming system.

Velvet genetics

- Rapid gains are possible one velvet farmer lifted 2 year velvet weights from less than 3kg to 5.8kg in 10 years.
- The gene pool for the national velvet herd is relatively small, so establishing parentage is useful.
- Having more velvet studs joining DEERSelect will help the industry.
- Culling older stags more heavily will help accelerate genetic gain.

continued on page 14

Methven workshops: continued

- Culling on weights should take regrowth into account, as this can sometimes be almost as heavy as the first cut.
- Because some stags are later maturing than others, it's not always a good idea to set the bar too high for culling two-yearolds. Some that grow a mediocre head at two years can go on to be great producers.
- As the supply of velvetting stags increases, farmers will be able to be more choosy and reject non-traditional types, favouring clean styles.

Venison genetics

- Venison genetics are cheaper than velvet you can get a good sire for less than \$5,000.
- While running a dual-purpose herd can have its challenges, some English sires (run mainly for velvet) do have quite good breeding values for growth.
- Select sires that will give you growth and good muscling you don't want big rangy animals if you are targeting the chilled season.
- Feed hinds well if you want them to reliably get back in fawn as a fawn with higher growth potential will create a higher lactation demand on the hind.
- When you select for maternal traits, don't sacrifice fertility for growth.
- Choose genetics that suit your system in terms of growth rates, mature weights and so on. DEERSelect can help you - stag BVs are on the website.
- There is no free lunch. You can't grow more venison per hectare without feeding
- appropriately.
- To accelerate genetic gain, select your replacement hinds from younger dams. Don't hang onto stags or hinds for too long for sentimental reasons.
- By using DNA for parentage matching, you can more easily root out the poor doers.



DEERSelect can help you identify the venison genetics to suit your breeding objectives. Photo: Jamie Ward.

Feeding velvet stags

- Key priorities for velvetting stags are, in order: Genetics, feed types and timing, and limiting post-rut weight loss.
- The best gains are made from feeding post-rut until June, and then again from about three weeks before button drop (around mid August).
- Supplements like velvet nuts can return double the investment through increased weights, but this needs to be monitored carefully to ensure you are getting the payback.
- Not giving two-year-old stags special treatment will give you a clearer picture of their true genetic merit, not masked by overgenerous feeding.
- Crops such as fodder beet, kale and swedes work fine for

velvetting stags over winter but, like all deer, they can get sick of the crop after two or three months.

Animal health

- Health and feeding go hand in hand; fewer health issues are seen when deer are well fed, but feed can be wasted if the deer aren't healthy.
- Minimising stress is another vital part of keeping deer healthy.
- Managing health risks is different for every property
- Be able to justify what you do for animal health, when you do it, why you do it, and with what.
- A health review and plan for the farm is an investment.
- Drench options are limited but use existing products to their best potential in the meantime. Under-dosing can help cause drench resistance; use the most appropriate products at the most effective dose rates.
- Parasite management is more than drenching manage holistically on finishing land. (See http://bit.ly/2ayJrKK for further information.)
- Adult stock rarely need drenching, and are a good source of refugia.1 Don't waste money drenching adult stock if it is not justified.
- Copper supplementation needs to be justified test and discuss risk with your vet.
- Leptospirosis is also a human health risk and farm health and safety issue.
- Identifying and controlling Johne's disease has been hard work and expensive, but worth it financially on properties that have tackled it.
- Take care when transitioning between feed sources. Deer health can suffer when rumen bugs are disrupted.
- Vaccination timing is critical; ensure time between shots is correct and keep vaccines at the correct temperature.
- On farms with foot issues, changing to rubber flooring in sheds has made a big difference.
- Information is key to making good decisions growth rates, trace element test results, slaughter data, and many more ways of assessing performance are all going to add value to a health review and plan.

Decision recording tools

- Before you start investing in recording tools, work out what decisions you need to be making, what information you need to support those decisions and - only then - what tools would be best suited to the job on your property.
- You will probably need information from more than one source to make well-informed decisions (e.g. kill sheets, Johne's Management Ltd).
- Invest time getting to know how to use new equipment or software (e.g. electronic weigh scales, FARMAX).
- Make sure you have good support if you have any problems with new technology.
- There is no single integrated farm information system that will cover all of your needs (although FarmIQ does cover quite a range), but several good tools for capturing, recording and analysing data are already being well used. These include:
 - Gallagher TSi and "Orange Box"
 - Tru-text XR5000
- ¹ A population of parasites on pasture that is predominantly susceptible to drench.



Methven Advance Party presentations



by Phil Stewart, Deer Industry News Editor

Nine Advance Parties, all part of the P2P programme, gave presentations at the July Advance party workshop on the projects they'd been running and these yielded a wealth of information for members of other groups. Here's a summary.

Canterbury: Up the hill

DAN HARPER REPORTED on a project at Quartz Hill Station (Rakaia Gorge), where a newly deer fenced 220-hectare hill block was being put to work to help cut winter feed costs while lifting weaning weights.

In the first year the block was stocked conservatively at 1.2 hinds/ha and pasture covers and quality were assessed during summer, along with hind condition. The hinds and fawns were brought off the block in late February, just before weaning. The hinds were wintered on the hill block, coming down to the flats in August to silage and grain.

The strategy was repeated the following year with a few tweaks. The stocking rate for fawning was lifted to about between 1.8–2.0 hinds/ha and the hinds and fawns came off the block earlier (mid January) to fescue and clover. The hinds were wintered on there for longer (four months, to the first week of September).

Harper said fawn survival was maintained and weaner weights to 10 April improved by 4kg. Wintering hinds on the hill block has cut winter feed costs (silage and grain) significantly. He said regular monitoring of pasture covers and hind condition scores had given them the confidence to increase the stocking rates. In future seasons, separating out the late fawners would allow them to bring hinds and fawns down onto specialised feeds earlier.

While the fencing of the block had been expensive, the ongoing savings in winter feed costs were significant.



A hind on the hill block at Quartz Hill Station, 2014. Photo courtesy Dan Harper.

continued on page 16

Methven workshops: continued

- > FarmIQ
- > FARMAX
- > DEERSelect
- > P2P deer growth curve chart and spreadsheet
- > P2P farm production recording spreadsheets with KPIs
- For a detailed summary for the recording and decision-making workshops visit: http://ap.org.nz/nationalworkshop2016

Integrated livestock classes

Advantages:

- Ragwort control (sheep)
- Better parasite/ tick management
- Pasture quality control (cattle)
- Diversified cash flow and risk



Technology like this Gallagher TSi is becoming more commonplace in deer sheds.

- Cattle can be used as a lever, more flexibility in system. But...
- It can create a complicated system
- Wider range of resources and labour skills needed
- Workloads can be higher, e.g. in spring (lambing/velvetting)
- Cattle can interfere with fawning
- Some diseases (e.g. lepto, Johne's disease) can be passed between stock classes
- Sheep can graze pasture too low.

Hill country management

The following were among the issues identified:

- Fencing: paddock size is important for pasture and stock management
- Waterways: not always easy to fence off
- Security: Losses through poaching or washed-out floodgates
- Feeding: More priority needed for deer, especially during lactation, with specialist crops and forages for deer
- Regulations: Environmental constraints and limits on nutrient loss can limit options.

Methven presentations: continued

Southland Elk/Wapiti: When is the right time?

It's well known that you can be chasing your tail when trying to pick the best time to send finishing stock to slaughter. Do you go early and catch the peak schedule but with lighter carcass weights? Or do you keep piling on the liveweight – and velvet weight on the males – and send them off later but with a falling schedule and higher feed costs?

The Southland Elk/Wapiti Advance Party did a small trial with two separate mobs to test the cost versus benefits of each strategy. John Hamilton and Murray Hagen presented the findings.

Each mob was ready for slaughter in early October. One was held back for 21 days and the other for 40 days. Overall the 40-day delay yielded almost double the benefit of the 21-day delay.

The mob held back for 21 days grew an extra 3kg of venison on a steady \$8.75 schedule, a gain of \$26/head. Added to this the spiker velvet returned \$27/head. The cost of additional feed was \$13/ head, meaning **a net benefit from the 20-day delay of \$40/head**.

The mob held back for 40 days did better, despite a falling schedule. They added 21kg liveweight, while the schedule dropped from \$8.75 to \$8.00. The extra venison earned \$49/head and the return for spiker velvet was \$54/head. Taking the extra feed cost of \$24/head into account, **the net benefit from the 40-day delay was \$79/head**.

Presenting the results, John Hamilton said holding the animals back longer also gave a better idea of the velvet potential of the stags; in the 40-day mob a couple of males were spared an early trip to the works and kept on as velvetting stags.

While many seasonal and price variables can affect these outcomes, John Hamilton said it was worth talking to your meat company and considering holding some animals back. "It's there for the taking," he concluded.



Murray Hagen (left) and John Hamilton answer questions about their group's trial looking at the cost benefits of delaying slaughter by 21 or 40 days. Photo: Phil Stewart.

Hawke's Bay: Winter crops

The experience of the Hawke's Bay Advance Party trialling winter crops has been well documented in *Deer Industry News* (see August/September 2015 issue) and the initial experience was so successful that the group has repeated it this year.

Daniel Spiers said the group wanted to develop more efficient

winter feed systems, get condition back onto stags quickly after the rut and to winter mixed age hinds. They also wanted to save on expensive bought-in supplements and to use the crops as part of a regrassing programme.

The group's facilitator organised and undertook cutting and measuring the crops and results were shared, so the group was effectively able to run quite a large trial between them – something that wouldn't have been possible farm by farm.

Spiers said a lot was learnt, not only about growing the crops, but also about how best to feed them (break sizes, stock classes and so on). On their own property (Maranoa), for example, they had found Regal Kestrel kale grew too high, with stalks "like baseball bats" so utilisation wasn't so good. The thinner-stalked Sovereign kale had been much better for deer.

The exercise had also upskilled the Advance Party members on feed budgeting for crops in terms of protein levels and metabolisable energy, etc.

At Maranoa the winter feeding had helped lift average velvet weights in mixed age stags by 650g.

Agronomist Hamish Best had been brought in as an outside expert and he had also learned plenty from the project. (See also article on page 3 featuring an update on the Hawke's Bay crops programme.)



Hinds on winter kale at Maranoa, August 2016. Photo: Phil Stewart.

Wairarapa: Spray and pray

Adrian Moody described a project to improve high country pasture on a steep, north-facing 12-hectare paddock in a summer dry part of the Wairarapa. A common problem for Advance Party members in this area is maintaining pasture quality to feed hinds and fawns well through summer and autumn.

The paddock was strip grazed with beef cows for a month to late August and sprayed out in late September (Roundup at 4 litres/ha). (Thanks to a faulty nozzle, the spray-out wasn't entirely successful.) A mix of plantain, chicory and white and sub clover was sown by air on 20 October and urea applied on 11 November.

Moody said the strike was patchy but acceptable and they would consider borrowing a mob of sheep from a neighbour to help tread in the seed if the exercise was repeated.

The "prayer" part of the exercise worked and forecast rain came at the right time two days after the seed was dropped. The crop looked good by February and hinds and fawns went on then. By May the paddock was still the "best on the farm". The total cost of the exercise was \$582/hectare.



While the strike was patchy, the overall results weren't too bad. Photo courtesy Adrian Moody.

Hawke's Bay Fast Finishers: The Herbs

Simone Hoskin (facilitator) said the group members all use herbs to varying extents to promote fast growth and achieve finishing target dates and weights. Chicory and plantain are the main species used, but with a range of varieties, mixes and sowing times. She said management of the forages and clover content are vital for success (omitting clover means animals miss out on protein and the paddock misses out on nitrogen fixing).

Irrigation could give high yields but a "soft" crop, potentially more susceptible to root rot, while drier conditions gave lower yielding but stronger crops. However, persistence is ultimately dependent on grazing management.

Hoskin said crop costs could be highly variable depending on cultivars and sowing methods used. Chicory could persist for up to four seasons, depending on how it's used as part of a regrassing programme, but it might be only one or two seasons, with grass progressively added after that. "As soon as grass is added to the mix you'll be compromising the chicory."

Plantain is more persistent and typically lasts four to six seasons, but has a lower feeding value.

Hoskin said the seed mixes used depended partly on soil type, but clovers are key. New red clovers were more grazing tolerant than before while chicory provided superior grazing but didn't persist so long.

Plantain and chicory shouldn't be planted together as they are largely competitive. Palatability was another factor to consider, as each crop can become bitter at different stages of the season, but generally deer prefer chicory to plantain. Thistle control was an issue in these crops and Hoskin suggested mechanical topping or using a "weed wiper". Chicory was not thistle herbicide tolerant but some plantain cultivars were being selected for herbicide tolerance, making thistle control easier.

Hoskin said deer are more tolerant than sheep and cattle of highly soluble carbohydrate and protein, so adapt to herbs quickly. The big issue with the crop is rotational grazing – fast rotations are needed in spring to keep on top of the growth.

North Canterbury: Pre-rut weaning gives a flying start

Mark Forrester is a member of the newly formed North Canterbury Advance Party and runs sheep, beef, deer and dairy grazers on three blocks totalling 1,600 hectares. They breed and finish from 850 straight red hinds, also buying in 250 weaner stags. They had been getting a few deer into the chilled trade but not many – there was room to improve.

He had been watching what the Zino brothers had been achieving on their farms during the Focus Farm programme – a key difference had been the timing of weaning. The Zinos had pre-rut weaned, as had nearby deer farmer Lyndon Matthews, while Forrester had post-rut weaned. Comparing growth rates with those on Matthews' operation, Forrester said his weaners were 9kg behind by 1 June.

This year Forrester changed to pre-rut weaning and has already seen the benefits. By 1 June his weaners were 10kg ahead of where they had been last year. Strategic feeding to take advantage of weaners' fast autumn growth had helped.

He managed to take advantage of January rains to get a good rape crop in this autumn and had trained the weaners with an electric fence so they could go onto a break. "Once they get a zap they remember it for life."

Regular weighing was an important part of the change, giving a good fix on growth rates. Another benefit of the pre-rut weaning this year was that the hinds were in better condition for mating and he'd noticed earlier mating activity this year.

Another change he made recently was to use a self-feed silage pad to free up some pasture and help get finishing stock off to a flying start in spring.

Forrester is upbeat about prospects for the industry and looking to increase deer numbers while reducing sheep. He said the Advance Party is a diverse mix and they are learning a lot from each other.



Herbs in the forage help promote fast growth but need to be managed well. Photo: Simone Hoskin.



Pre-rut weaning helped Mark Forrester reach weight targets faster. Photo: Courtesy Mark Forrester.

continued on page 18

Methven presentations: continued

South Canterbury/North Otago: Supplement gives good return

Facilitator **Justin Geary** presented on behalf of Kris Orange, outlining a cost benefit trial to evaluate ways to supplement a winter diet of fodder beet and baleage for finishing stock.

Orange, with equity partner and farm manager, Dave France, had been wanting to improve winter growth rates for the weaners they finish, so trialled four variations using complementary feeds built around a fodder beet/baleage regime:

- 1. Fodder beet/baleage
- 2. Fodder beet/baleage/PKE
- 3. Fodder beet/baleage/PKE/minerals
- 4. Fodder beet/baleage/Deer Supreme*

The trial took place over 100 days. Deer fed the basic fodder beet/baleage diet gained 3.24kg carcass weight over the period, while those that had the Deer Supreme added gained 8.64kg carcass weight over the same period and were the best performers by a long way.

The Deer Supreme supplement was also the most profitable option, yielding a net gain over the period of \$52.30 per deer, versus \$24.30 for those on fodder beet and baleage alone. Those with the added PKE yielded \$31.45/head and the PKE/minerals mob gained \$36.80.

Geary said that at a \$7.50 schedule, the Deer Supreme option would give an extra 5,400kg carcass weight and \$40,500 in revenue over 1,000 weaners, less \$13,750 for the feed and any feeding out costs (they were fed using Advantage Feeders at a ratio of 1:200). This gave an overall net benefit of \$26,750 per 1,000 weaners finished (\$26.75/head).

He said the weaners eat all the leaf off fodder beet first, and with it, all the protein. The Deer Supreme feed's 22 percent crude protein filled an important gap in the diet, and other high-protein supplements could give the same results.

* A 22 percent protein loose feed incorporating PKE, soya hull pellets, wheat, barley, dried distillers grain, soyabean meal, lime flour, salt, magnesium oxide, molasses and vitamins and minerals.



Kris Orange (left) and Dave France: Looking for a cost-effective way to boost weight gains over winter. Photo: Mike Bradstock.

Central Regions: New knowledge paying off

Matt Dalley recounted the experience of industry newcomers Bruce and Margaret Niven, who farm near Otaki. (See *Deer Industry News* February/March 2016 for an extensive article on the Nivens' experience.)

Dalley said the Nivens faced several challenges when they took over the property. These included overstocking, pasture quality, fertility and the genetic base of the herd.

The couple have wasted no time tackling these, changing to a 75:25 venison: velvet mix, investing in better genetics, starting a regrassing programme and employing a soil and fertiliser consultant.

Things had started to turn around on the 76-hectare farm but one of the most significant changes had been the Nivens' upskilling and willingness to learn – the collegial nature of the Advance Party was a perfect environment for this to happen.



Bruce Niven feeding out maize. Photo: Lindsay Keats.

Mackenzie: Giving deer a higher priority

Hamish Mackenzie said most members of the Mackenzie Advance Party had seen deer as a lower-priority stock class (although this is definitely not the case at Clayton Station and Haldon Station).

Joining the group had focused their attention on the deer enterprise and encouraged them to start recording and monitoring progress. When the group started, only two farms had weigh scales. "Now seven farms have them."

Animal health plans are living documents that are reviewed annually and body condition scoring for deer is done routinely throughout the year within the group.

"We don't record for the sake of it. We get the information we need."

Mackenzie said members are far more aware of hind feed requirements and weaner growth, especially in late lactation and going into winter. Pasture development and strategic feeding were also managed more actively.

"We are thinking more about getting the right genetics for our production systems. Three of the farms have invested in new genetics since the group was set up."

Because deer were being prioritised, some have been performing better, despite a couple of poor summers.

He said the concentration on deer within the group was a relief from having to talk about Merinos and footrot. "Members of the group are gaining confidence in their deer operations and having fun doing it. I used to consider myself a sheep and beef farmer, with deer, now I'm a sheep, beef and deer farmer".

When is a "wapiti" a wapiti?

There seem to be a large number of names used when talking about a wapiti, says the Elk and Wapiti Society in the following supplied article.

ARE YOU REFERRING to an elk or a wapiti or a Fiordland wapiti or a hybrid, crossbred or an F1 or a B11? Loosely they are all called "wapiti" but are they all the same?

The results of the Deer Progeny Test (DPT) for growth to 12 months showed where the progeny of wapiti terminal sires (dark blue) rank, compared with progeny of red deer maternal sires (Figure 1). The slowest growing Wapiti progeny were heavier than the fastest growing Eastern red progeny.

There are two very important considerations here, however. There is a large variation within the spectrum of the performance of the (dark blue) wapiti terminal sires. This is exciting as it highlights the potential for the breed to improve, especially considering the limited selection pressure for growth applied to date. The second point is acknowledging that among the DPT sires there is not a lot of difference in the growth of the progeny of the lowest performing "wapiti" sires and that of the highest performing Eastern reds. Further the DPT data represents just 35 sires. There will be out there in the industry Eastern reds with higher growth performance and eBVs and Wapiti with lower growth eBVs and performance.



Figure 1: Liveweight traits for 12-month weight in Deer Progeny Test – maternal and terminal sires.

To get a better understanding about this we need a short history lesson to explore the differences between these "wapiti".

A gift from the United States President, Theodore Roosevelt, in

continued on page 22



Inaugural technology expo

by Phil Stewart, Deer Industry News Editor

About 100 people attended a deer-focused technology expo at the Town & Country Club in Gore on 29 June. The event was organised by the NZDFA Southland Branch as part of the Focused Farming programme and was well supported by exhibitors and speakers.

VISITORS COULD DIP in and out of the programme of presentations held in side rooms through the day, and also take time to visit the many trade stands. Most of the important names in technology were there, including Gallagher, Tru-Test, FarmIQ, DEERSelect and many others.

There were presentations from Allflex (tissue sampling), DINZ (Southland environmental issues; DEERSelect), Agribasics (environmental solutions), Agricom (forage systems), Johne's Management Ltd (health and production recording), Agrimap (farm mapping), Genomnz (genomic opportunities), Fiber Fresh (feed testing), Gallagher (measuring and managing), AbacusBio (growth targets; drone technology), FarmIQ (profitability), Grassco (pasture measurement) and AgResearch (DEERFeed app).

Dave Lawrence, who was one of the organisers, said he was pleased with the day and grateful for the generosity of exhibitors and presenters as well as the Town & Country Club, which provided the venue gratis. He said the format allowed a more leisurely and in-depth perusal of the technical exhibits than is available at the main industry conference.

Environmental challenges in Southland

DINZ's Lindsay Fung brought deer farmers up to date with the proposed Southland Water and Land Plan and what it means for farmers. While submissions have now closed, the consultation goes on, with hearings on submissions to be held early next year and the plan likely to become operational later in 2017.

Fung outlined the general issues for farmers as follows:

- Current land users will be expected to adopt "good management practices" (GMPs) to manage adverse effects on water quality.
- New dairy or winter grazing is prohibited or discouraged.
- Farms must complete a management plan in order to remain a permitted activity, which includes a nutrient budget, GMPs and riparian management plan. Cultivation and winter grazing have requirements as well.

Of specific relevance to deer farmers in Southland is the following proposal:

• Deer on land with a slope of less than 16° excluded from water bodies from May 2020 unless a resource consent is granted. The NZDFA Southland Branch has made a submission on the

proposed plan. They will seek amendments to the proposed stock exclusion rules that better reflect the realities of deer behaviour and established farm practices to manage those behaviours. Submissions should be available for viewing on the Environment Southland website in a few weeks.



Donald and Andrea Martin of Wyndham-based GrassCo give farmers quick and accurate pasture cover readings with this New Zealand-developed C–Dax unit. Donald Martin said the data is supplied to

farmers within half an hour of the readings. "It's very accurate and we can give weekly covers and projections. This allows us to spot fast-growing pasture early for making baleage. It also allows us to pick out poorer-performing paddocks when this isn't always so easy to see. Not all paddocks are equal." Martin said the readings and data are just \$180+GST a time and are a big help for planning and setting up stock for winter.

www.grassco.co.nz

Kelly Heckler, Agribasics Environmental Solutions, spoke to farmers about grazing management to help minimise the loss of nutrients and sediments into waterways. She said the impact of rainfall events also needed to be factored into planning. Heckler, a sheep and beef farmer, is also a certified nutrient management adviser. She and her colleagues can help farmers use OVERSEER



more effectively. Farm location mapping and data such as soil test reports, crop production and dry matter production all contribute to more accurate nutrient management, she said. www.basicsenviro.nz

Obituary: Richard Riddiford "The most enigmatic of men"

by Trevor Walton

The death of Richard Riddiford, "Godfather" of Martinborough and second chair of the Game Industry Board (GIB), has deeply saddened many people in a way they – let alone Richard himself – would not have expected.

SUE MCLEARY, COMMUNICATIONS adviser to the GIB during his time as chair, puts it simply. "When I learned of his death my strongest memory of Richard was of his kindness."

Famously gruff – some would say abrasive – he never left anyone in any doubt about his feelings. Some who experienced the full force of his annoyance were bruised by the experience. But those who worked closely with him also remember his fulsome praise for a job well done. Others remember with deep gratitude Riddiford's generous support when he learned they were facing a crisis.

Described by McLeary as "the most enigmatic of men", he struggled to form close emotional connections with others, but was clearly deeply loved by the nieces and nephews and close friends who spoke at his large funeral in the barrel room at Palliser Estate winery.

Former GIB chief executive MJ Loza was velvet marketing manager when Riddiford was chair. He says Riddiford took some time and convincing that someone deserved his faith – and was incredibly loyal to those he backed and respected.

"He was quick to get counsel from people he trusted, hungry to learn and made considered, strategic decisions. His sense of humour was wicked, and he was happy to laugh at himself too."

Riddiford died on 26 July after a three-month battle with lung cancer. At the time, he was living on Tablelands, the Riddiford family farm and was very active in the Martinborough community. He had retired from Palliser Estate in May 2015, after 25 years as managing director.

His contribution to Palliser and the wine industry was monumental. Despite the volatility of the wine industry, he delivered a profit to Palliser shareholders every year. He launched Taste Martinborough, which became a model for wine and food festivals around the globe, and was founder of the Pinot Noir Conferences and the Family of 12 – a group of privately owned wine companies that jointly market New Zealand wine internationally.

This outstanding contribution was recognised in 2000 with a New Zealand Order of Merit. In 2010 he was inducted into the New Zealand Wine Hall of Fame and last year as a Fellow of New Zealand Winegrowers.

Riddiford endeavoured to make a similar contribution to the deer industry, but he was unable to overcome the politics of the industry. In the words of inaugural GIB chair Tom Williams, "Unlike the wine industry, which embraced Richard's talents regardless of his gruff exterior, the deer industry wasn't able to do this."



During Riddiford's first years on the GIB, the Cervena® strategy was launched - an initiative that shared many of the marketing principles he applied so successfully to Palliser wines. This involved the board putting virtually all available levy funds into Cervena marketing.

Richard Riddiford photographed in 1995, shortly after he became Chair of the Game Industry Board. Photo: Trevor Walton.

But by the time Riddiford succeeded Williams as board chair in 1994, the clock was ticking. Two of the largest venison exporters and Cervena franchisees, Fortex and Venison New Zealand, had collapsed and their market share had been picked up by companies opposed or luke-warm to Cervena.

Meanwhile, the National government's Producer Board Project team had the GIB in its sights and was demanding reform. These forces, along with opposition on the board to Riddiford's style as chair, made it politically unsustainable for him to remain in office. In 1998 he stepped aside.

His departure was followed by a series of changes at the GIB including a reduction in the venison levy, a phase-out of the board's automatic funding of Cervena, the introduction of 50/50 farmer/processor funding and participation on the board, and eventually the replacement of the GIB with Deer Industry New Zealand.

In the years since, companies that were previously opposed to the Cervena strategy have embraced value-adding and brand differentiation. Indeed, the promotion of the Cervena appellation is now supported by all five exporters as part of the Passion2Profit strategy.

This came too late for Riddiford who sold his Tablelands velvet herd soon after losing the chairmanship. While he privately felt his time with the board was the lowlight of his career, he maintained many friendships in the deer industry, returning to the 2004 Deer Industry Conference to deliver a compelling address on the marketing of wine and venison.

continued on page 22

Technology expo: continued



Graham Hawkes of Invercargill's Paddington Arms Gastro Pub teamed up with Alliance Pure South to provide an excellent venison lunch for attendees at the Technology Expo.



Numat owner **Mike Judd** was on hand to talk to deer farmers about the benefits of soft floor surfaces for deer health and welfare.

Richard Riddiford obituary: continued

MJ Loza and Riddiford remained in contact.

"I will miss him as a friend and mentor – his advice on financial investments, wine choices, career choices and my love-life!," Loza says.

"When Richard talked about his successes he always played them down ('I just make more right decisions than wrong'), but he was fiercely proud of Palliser Estate as a brand and as a business. He was equally passionate about brand New Zealand and New Zealand teams and businesses succeeding internationally, and genuinely enjoyed and celebrated others' successes.

"And if you think he was frustrated by deer industry politics, you should have seen him at government and velvet industry meetings in Korea."

Riddiford will not be the last to learn that producer politics can be tough and unforgiving. But his marketing vision lives on.

"While talking with Richard when I helped write his speeches, I got the clarity of his thinking when it came to marketing. He was absolutely clear and true to his vision," says McLeary.

"His loss is very sad. There are very few people who have shoes as big as Richard's in this small country of ours."

Trevor Walton was publisher of *The Deer Farmer* from 1979–2007.



Simone Hoskin, Advance Party facilitator and also Scientific Adviser for Fiber-Fresh Feeds, was talking to deer farmers at the Technology Expo about the importance of understanding feed quality.

Wapiti: continued

1905 saw the first successful introduction of elk to New Zealand. These 18 animals interbred with red deer in the wilds of Fiordland over the ensuing 70 years and the cross became known as wapiti. ("Wapiti", white rump deer, is the native American name for elk.)

Live capture of these wapiti out of Fiordland was the basis of farmed wapiti in New Zealand. Elk genetics were introduced from North America for a decade from the early 1980s. The outbreak of chronic wasting disease in North America stopped any further importation of elk genetic material in 1998.

DNA testing helps sort just where these various "wapiti" fit in the scheme of things. The percentage of elk genes in an individual can be defined using the Genometer[™].

- Broadly speaking, an animal with over 90 percent elk genes is considered a pure elk.
- An animal with between 50–90 percent elk genes is considered a wapiti. Fiordland wapiti fit into this category.
- An animal with about 50 percent elk genes results from mating an elk to a red deer. F1 and B11s fit into this category
- An animal that has less than 50 percent elk genes is called a hybrid.

As a general rule, the terminal sires in the DPT with a lower percentage of elk genes were those whose progeny were at the bottom end of the 12 month weight graph. This is not rocket science – using a sire with about 50 percent elk genes over a red hind is going to produce offspring with 25 percent elk genes and 75 percent red genes. It is therefore not surprising that they will grow accordingly.

To optimise the chances of obtaining a premium in the chilled spring market, use a wapiti terminal sire. When selecting a wapiti terminal sire:

- try to find out what percentage elk genes the bull has
- where possible, look at his genetic merit for growth the commonly used eBV (estimated breed value) for growth is W12eBV.
- Article supplied.

You've come a long way, baby



by Phil Stewart, Deer Industry News Editor

Did you know that over the past 10 years, liveweight traits for red deer and wapiti increased three times faster than over the previous decade? That's one of the many impressive facts to be found in a recently published paper reviewing the first decade of DEERSelect.¹

A LOT HAS changed in the deer industry since DEERSelect – the deer industry's performance recording system built on the Sheep Improvement Limited platform – started operating in 2005.

Deer numbers have dropped from about 1.7 million to just over 900,000 and prices for both venison and velvet have been volatile at times.

Despite the overall drop in deer numbers, the number of herds recording on DEERSelect has stayed reasonably static over the decade. There were 19 recorded red herds at its inception in 2005 and in 2015 there were 18. (Some of the change reflects changes in the deer stud industry and the disappearance or mergers of various stud herds.) Wapiti herds started joining DEERSelect in 2007 and today six are on board, including two recent additions. This has brought the total number of herds to 24.



Yearling stag at Ruapehu Red Deer, a DEERSelect recorded herd. Photo: Melissa Stone.

The worrying drop in total deer numbers has had one perversely positive outcome: the percentage of the national herd that is being measured and recorded on DEERSelect has been growing. According to the authors of the paper, DEERSelectrecorded stags could satisfy 30 percent of the replacement sire market, three times its capacity a decade earlier.

Technology improvements

The technology supporting genetic improvement has come on in leaps and bounds since DEERSelect was created, which has made some processes easier and more accurate, while adding more statistical grunt to the data that's being recorded.

AgResearch Research Associate, Jamie Ward, was lead author

for the DEERSelect article and coordinates the data processing and sire summaries produced by the system. He says technology changes over the past 10 years have helped streamline and strengthen the service. One of these has been the development of reliable trans-cervical artificial insemination (AI). Embryo transfer technology has also helped accelerate genetic improvement while giving more options for breeders. These developments, coupled with a big drop in the price of semen in recent years, have made the dissemination of genetics from highly productive animals much easier.

DNA pedigree matching has also become much easier, he says. This has freed breeders from the need to single-sire mate or manually match fawn and dam, making recording that much simpler. The article notes that DNA matching is now done for entire cohorts, not just selected individuals, with more than 80 percent of sire breeding herds now using the technique.

Sharon McIntyre, who was appointed as DEERSelect Manager in 2013, says the shift to DNA analysis using "genome by sequencing", an advanced "SNiP"-based technology will also open the door to DNA developments for deer that haven't been possible under the now-outdated micro-satellite approach. This will add costs for breeders, however, as most herds will need to tissue sample all hinds.

McIntyre said lack of accurate birth dates for progeny has been a constraint for DEERSelect, but the use of scanning for fetal ageing has helped increase the accuracy of breeding values (BVs) that use this information.

The DEERSelect reference group, a group of breeders who guide the development of the programme, has made fetal ageing compulsory for DEERSelect breeders from 2017 for the official published breeding value lists.

The three-year Deer Progeny Test (DPT) and the enthusiasm and support shown for the programme by breeders, resulted in an increase in recording accuracy, the number of traits recorded (e.g., ultrasound-recorded eye muscle area, while the rate of gain in growth breeding value tripled.

McIntyre says the DPT has underpinned a huge improvement in the accuracy of recording; so too has the development of a manual and running of breeder workshops.

Venison focus

Much of the attention for DEERSelect breeders, and those who buy progeny from the recorded animals, has been on growth

continued on page 24

¹ Ward, JF, SB McIntyre, SA Newman and GW Asher (2016) Deer Select – review of the first decade. *Proceedings of the New Zealand Society of Animal Production*. Vol 76: 54–58.

DEERSelect 10 years: continued

- especially the EBV for 12-month weight (W12EBV). That has seen spectacular gains and stags with values topping 30kg above the average 12-month weight are now seen in DEERSelect sire summaries.

It's seen as one of the most obvious ways to put extra money in farmers' pockets because animals with a high EBV for this trait should breed progeny that get to market weights faster. But genetics is not a free lunch – higher-performing animals require more feed.

The focus on this one growth trait is a double-edged sword, for other reasons, too. On the plus side, it has put BVs in the spotlight in a way that's easy to understand, and they are now a regular part of discussions by commercial farmers about increasing profitability.

But on the flipside, the interest in 12-month weight can come at the expense of other, equally important traits that are measured by DEERSelect. Traits such as 12-month weight provide a useful snapshot but do not tell the whole story on genetic merit for growth.

"DEERSelect is working hard to bring other key traits into consideration – muscling, and also more maternal traits," McIntyre says. "We have conception date, which selects for early natural mating and there is adult size. A breeding value that reflects fertility, or conception success, particularly in young hinds, would be helpful."

These other traits tell a much more complete and nuanced picture of genetic merit.

"I have been changing focus to growth and meat to encourage more balanced selection, with animals that have the right growth BV for the farm, with above average meat yield. This will help ensure animals are well muscled for their size," McIntyre says.

She adds that 12-month weights are a useful indicator of genotype, but would like farmers to think about the full range of recorded traits when they are setting their own breeding objectives and selecting sire stags.

"The important thing is to find traits that suit your system and farm environment," she says. "Those buying stags should be doing their homework online, looking at the DEERSelect sire summaries, talking to other farmers and quizzing the breeders." While venison producers shouldn't be distracted by an impressive set of antlers on a stag, they should nonetheless look at the animals they're interested in as well as the numbers. "We should still take good conformation into account."

"Fitness traits such as pregnancy rates and fawn survival are important aspects of animal robustness and need to be included in the indexes." McIntyre says maternal traits are high on the priority list for DEERSelect indexes, noting that recording of measures such as conception date and mature hind weight need to be more widespread and consistent for the traits to carry as much weight as BVs for growth.

What about velvet?

There are two velvet herds on DEERSelect, with indexes available for two-year velvet weight (VW2) and mature velvet weight (MVW).

A challenge for getting robust velvet breeding values is that in some velvet/trophy focused herds not all animals have their velvet cut and weighed – some are grown out for trophy, so there is no overall age group average for benchmarking. There has been increasing interest from some commercial velvet producers in recording on DEERSelect. One commercial velvet producer has recently joined, two others are expected to join soon and a trophy breeder is also showing interest.

The next 10 years

In their paper on DEERSelect's first decade, the authors note the significance of the DPT programme, which has contributed new genetic parameters for growth, meat yield and quality traits across reds and wapiti, as well as traits such as temperament, resistance to parasites and skin quality. Updated meat traits based on DPT results will be in place for the coming season. Work is continuing to establish more maternal traits and improvements are being made to the evaluation process. Other traits such as resistance to parasites (based on the CARLA test) are still works in progress.

McIntyre says temperament will never be an easy trait to include in a genetic improvement programme – as it is hard to measure objectively. Behaviours such as aggression and agitation in pens were measured during the DPT programme, but only one trait was even moderately heritable (agitation in pen).² Heritability for other temperament traits was low or very low, indicating that environment is probably more important than genetics in this case. Useful strategies on temperament include getting animals accustomed to handling, making sure their first handling experience is a good one while culling animals that show unsuitable temperaments.

Ultimately the success of DEERSelect depends on those who use it – the breeders who record the performance of their sires' progeny and feed this in through a bureau, and the commercial farmers who peruse the sire summaries to find sires with the right genetic profiles to suit their own breeding objectives.

Since her appointment, Sharon McIntyre has worked with breeders and commercial farmers to spread the message about the power of genetics and how it can put money in their pockets. The next 10 years will reveal how well they've been listening.



Ken Moore of New Zealand Performance Recording Services and Julia Aspinall of Genetic Gains Ltd visit the DEERSelect stand at the recent Deer Technology Expo held in Southland. The two bureaux run by Moore and Aspinall provide data formatting and reports for DEERSelect users, both breeders and their customers. Moore said the quality of data being submitted is improving and, in turn, people are getting better value from the genetic information it provides. Photo: Phil Stewart

² Schütz, KE, JF Ward, NR Cox and GW Asher (2016). Development and evaluation of a temperament-scoring system for farmed deer: genetic and environmental components. *Proceedings of the New Zealand Society of Animal Production*. Vol 76: 109-113.

System a "national jewel"

by Phil Stewart, Deer Industry News Editor

Ruapehu Red Deer has been using DEERSelect since it first became available, both to select genetics and to record its own herd.

OWNER PAUL HUGHES is an enthusiastic supporter of the recording system and says the Sheep Improvement Limited platform that's used for DEERSelect is a "national jewel".

Hughes has a strong venison focus and that's his priority for genetic improvement. His main priority is the EBV for 12-month weight, but he also takes account of weaning weight and maternal traits.

Despite the heritability figures for temperament during the Deer Progeny Test not stacking up strongly (see main article), Hughes pays a lot of attention to the trait, following a tradition that goes back to the herd's origins in the 1980s.

He's sourced genetics from various places including Marals (known for their quiet temperament) from Sir James Fletcher and from the former Canterbury Imported Red Deer Stud (he purchased this herd in 2013). Now he mainly uses semen from Deer Improvement.

He gets an average conception rate of 66 percent from AI and uses his own spiker stags as backup, achieving an overall fawning performance of 92–93 percent.

In addition to its BVs, Hughes likes to scrutinise each stag that he's considering in the flesh – mainly to get a better feel for their temperament. "I do this every year, religiously. I like to get in with



Steve Kelly, Southern South Island Key Account Manager for Allflex, shows off the Allflex Tissue Sampler at the recent Deer Technology Expo in Southland. Kelly said the sampler caters for the new "genotypingby-sequencing" (GBS) technology recently introduced by GenomNZ for enhanced DNA parentage and genetic analysis. Tools like these are enabling DEERSelect to broaden the scope of services it can offer. Photo: Phil Stewart



Paul Hughes: DEERSelect is generating solid figures.

the stags and watch how they behave, especially as they enter the shed."

Using DEERSelect to both choose genetics and record his own stud herd, Hughes says he's been able to make rapid genetic progress. "This year the W12EBV for my sires ranges from 20 to 26.5kg. If you mate a stag with a 26kg EBV with a hind that has a zero EBV, you are still going to get a 13kg difference at 12 months. That's the difference between an 80kg and a 93kg animal."

But there is no reason to limit genetic improvement to the stag's side, Hughes adds. "If you can get those higher BVs into your hind base as well, you can capture much bigger gains."

He publishes the BVs of the sire stags he sells each December in the sale catalogue and he says the prices paid strongly reflect these figures. At his 2015 sale he sold 29 stags averaging \$5,948 with a top price of \$9,000. All but one of the stags was over 200kg at sale.

Velvet genetics are not a priority – "you can't have it all" – but he doesn't totally ignore velvet either. "I still select for good velvet style and weight. That way the stag can help pay its way during its productive life if it's cutting 5 or 6kg at maturity."

The Ruapehu Red Deer Stud is established at 450 hinds at this stage. Lower BV weaners are culled at 12 months and sold, but by arrangement the hinds he sells are not used for breeding.

Hughes doesn't find the recording required as part of DEERSelect to be too much of a bind and the costs of being involved are not onerous. Confirming parentage is probably the most expensive of the jobs, he says.

"DEERSelect is generating solid figures. The genetics we are sourcing give us growth and maternal ability – you need both."

Hughes says DEERSelect should continue to evolve, with traits such as meat yield likely to play a bigger part in future. "For now, the venison industry needs to grow bigger deer faster from its existing hind base so that markets can be kept supplied. DEERSelect serves us very well for that."

Woodtown South Pure Woburn herd established

by Gerard Hall, Deer Industry News writer

Henrietta Russell describes finding Woodtown South, her family's 23-hectare deer farm on the Crown Terrace overlooking Arrowtown as one of the best and luckiest things ever.

IT WAS WHILE holidaying with friends in Arrowtown in 2005, Henrietta noticed a small sign at the top of the Crown Range zig-zag simply saying "property for sale, magnificent views". The views were indeed breath-taking and she noted the contact details.



It was "love at first sight" when Henrietta Russell first saw her 23-hectare Crown Terrace property. Photo: Gerard Hall.

"Reflecting on it now, I couldn't really imagine living there back then, and eventually put the note away," Henrietta says.

How things can change. Five years ago while she was based in Matamata (where she is involved in the Thoroughbred industry – see sidebar), Henrietta's eldest son Andrew rang and asked that she fly to Queenstown and look over a property that might be a sound investment. Henrietta obliged, as parents often do for their children.

Driving up the zig-zag again on their way to look over the high country property, Henrietta casually mentioned to the real estate agent that she had seen a most beautiful property here several years earlier.

The agent knew that property well and said if she liked that one, there was a much better property available now – with even more spectacular views. It really was love at first sight and after going through Overseas Investment Office for approval, the property was hers.

"So that was it," Henrietta recalls. "It was one of those 'oh my god' moments, and now we are so lucky to be able to enjoy a property with the most amazing views and incredibly positive vibration."

A team of skilled local builders converted an existing barn structure, half of which had been imaginatively converted into a lodge. The other half was a working building that the team converted into a home. While deciding what to do with the land, Henrietta discussed the options with her neighbours, deer farmers Lindsay and Gayna Irwin. Among the options considered was Irwins leasing it for grazing.

Meanwhile, Lindsay set about fencing and improving the pastures into the 18ha effective grazing area. A 2.5ha unfenced area surrounding a pond is now drilled with red clover for baleage. The balance is a mix of lawn, trees including an orchard, plus a small undeveloped block.

To save the expense of building a deer shed, Henrietta and Lindsay decided it would be simpler to use the Irwins' facilities – all they had to do was make holes in the boundary fence and swing a few gates.

It was following Clive and Elsie Jermy's decision to disperse their Stanfield stud herd – which had been based on genetics from the red deer herd at Henrietta's home, Woburn Abbey – that she realised there was still a need to maintain a purebred Woburn nucleus in New Zealand.

Henrietta is excited about building on the already enormous contribution Woburn red deer genetics have made to the development of an industry she believes has a great future.

"What better place than Woodtown and I have such nice neighbours to do it with. It would simply not have been possible without Lindsay and Gayna's input, skills and enthusiasm for deer farming. So here we are," Henrietta says.

In March 2013, a select group of 25 pure Woburn hinds plus master stag Haywood were purchased off market and transported to their new home above Arrowtown.

The proven sire Bloomsbury was later purchased from Stanfield, and ½ Woburn: ½Warnham stag, Berry, was purchased at Stanfield Bangor's final stag sale in 2015.

Berry cut 8.0kg of velvet as a three-year-old and Henrietta is



Bob Atkinson purchased this Woodtown South stag for \$25,000. Photo: Jo Boyd.

now considering using him in the Woburn Abbey herd.

The aim at Woodtown South is to maintain a nucleus of 40 breeding hinds plus young stock and sale stags. With the first sold this season, only the best of each year's crop will be available for private sale.

This breeding season, 22 of the 40 Woodtown hinds were synchronised and 13 days later inseminated with semen from pure Woburn stags Bedford, Henry R, and Haywood. As well as being used as backup sires, Bloomsbury and Berry were mated to the other 18 hinds.



Mixed age Woodtown South hinds. Photo: Gerard Hall.

Sold as two-year-olds, this year's catalogue of four sire stags fetched an average of \$11,000, with Bob Atkinson outlaying the top price of \$25,000 for a son of Haywood. Five stags sold for velvet production made \$1,000 each. A selection of yearling hinds will be available later this year and semen from Bloomsbury and Berry may be offered to the industry.

With her love for New Zealand and passion for Thoroughbred breeding, watching her horses winning and now her Woodtown South red deer herd thriving high up on the Crown Terrace, Henrietta spends six months of a year in New Zealand and six months in England, where all her children live.

NZ connection started with tahr

The Woburn Abbey connection with New Zealand goes back to 1904 when the Duke of Bedford gifted the government three pairs of Himalayan tahr from his Woburn Park herd for release in the Southern Alps. Another six males and three females followed five years later. The generosity was recognised two years ago when Henrietta unveiled a statue of a tahr, which stands on the shores of Lake Pukaki.

How it began

THE FIRST PURE Woburn Red deer imported into New Zealand were bought by Sir Tim Wallis and the late Sir James Fletcher in the early 1980s.

Soon after, Henrietta Duchess of Bedford and her late husband Robin, 14th Duke of Bedford, custodians of Woburn Abbey, the family's estate and home of the famed Woburn Red deer herd, formed a business relationship with Clive and Elsie Jermy. Further shipments, including live deer, embryos and semen were made, initially to the Jermys' Stanfield Oaks deer stud.

Spanning more than 30 years, the relationship ended only two years ago after the Jermys decided to disperse their highly regarded Stanfield stud deer herd and sell Bangor, their Canterbury farm.

"The success of Woburn red deer and the impact they are having in New Zealand has solely been due to Clive and Elsie's outstanding efforts," Henrietta says. "Their Stanfield herd has been the shop window, an impressive one at that."

She says Robin established a red deer herd in New Zealand to protect the valuable Woburn genetic resource against the possibility of foot and mouth disease breaking out in England and the herd being slaughtered.

Centuries of breeding Woburn red deer to look beautiful for people who visit the estate is the reason the line has become so prized. They are renowned for their highly heritable classical, thick, heavy beamed, multi-pointed antlers, valuable traits for both velvet production and the trophy market.

Woodtown South at a glance

Area: 23 hectares (18 ha effective)

Stock: 40 mixed-age hinds 8 R2 hinds 13 R2 stags 31 mixed sex weaners. Master stags: Bloomsbury and Berry



AUGUST/SEPTEMBER 2016 27

Obituary: Gary Walker

by Gilbert van Reenen, Wanaka

The unexpected death of Wanaka veterinarian, Gary Walker, is a huge loss to the deer industry and Upper Clutha community.

GARY MOVED TO Wanaka from Feilding in 1985 with his wife Joss and young family to join me in partnership in the expanding Aspiring Veterinary practice. Some years later, Gary took over ownership of the practice. He had been keen on the outdoors, the mountains, deer and hunting from boyhood.

For 30 years he loved the work here, the district and the people. More than 600 attended his funeral.

Gary was the quintessential enthusiastic, knowledgeable, pragmatic, straight-talking, brutally honest rural vet. Heartfelt tributes to him have continued to flow from friends, clients and colleagues.

Colleague Carol Hollebon describes Gary as the most capable vet she has ever encountered – always fair, honest and forthright when dealing with staff and clients, readily taking up new challenges, helpful and encouraging with colleagues.

Matukituki Valley deer farmer and helicopter operator, Charlie Ewing, was impressed with Gary's genuine interest in his animals, farming systems and workers and Gary's spectacular work ethic.

These sentiments were echoed by neighbouring deer farmer runholders, Grant and James Cochrane at West Wanaka Station.

Charlie commented on the attention and practical advice Gary gave to the many young students who came for work experience in the practice. He expected and invariably received the best from them.

Jonathan Wallis of Minaret Station on the western shore of Lake Wanaka, concurs that Gary was an exceptional vet. Jonathan admired Gary's passion for animal health and welfare and his sound understanding of the business of farming.

"He balanced diagnosis, treatment and prevention well and was tremendously respectful that the livestock represented the livelihood of the farmer and their family. But beyond being a vet he was also a wonderful friend to his many clients."

Jonathan, his family and workers on the remote station relished Gary's visits, catching up on his recent hunting exploits and enjoying the chance to share what was happening in the rural community.

Emeritus Professor Frank Griffin from the Deer Research Laboratory at Otago University believes that Gary's dedication to veterinary practice will be an exemplar for succeeding generations of vets.

Frank observed that Gary's unique skill was his ability to combine field diagnosis with laboratory science, to produce "smart outcomes" in the management of animal health. Frank saw in Gary a dedicated practitioner who evoked amazing levels of loyalty and confidence in his clients and all who worked with him.

Gary built up and willingly shared a valuable bank of field knowledge about the behaviour and patterns of infection of tuberculosis and Johne's disease in the region's deer herds.

Another former colleague, Bruce Bissett, commented that Gary



Gary Walker: A dedicated deer veterinary practitioner.

had all the attributes of a successful vet. He was bright (his degree was conferred with distinction), decisive and well organised, with impressive practical and communication skills.

Gary once told Bruce that he felt blessed that his extensive and varied practice area of the Upper Clutha and Omarama basins, across to the West Coast from Jacksons Bay north to Fox Glacier was such a wonderful place to practise and he loved every minute of it.

For Joss, in addition to the many qualities admired by his colleagues and clients, Gary had an extraordinary ability to do or fix almost anything. But above all was his devotion and love for Joss and their children, Chris, Mike and Clare and their own growing families.

Gary and Joss had just reached a time in their lives when the pleasures of grandparenting just kept getting better and better. They had many projects planned, many more mountain biking trails to ride. While Gary's scaling back of work hours was a frequent topic of conversation, that was tragically never realised.

Gary will be sorely missed and we in the New Zealand deer industry salute him.

Research consortium calls time

by Phil Stewart, Deer Industry News Editor

The Johne's Disease Research Consortium (JDRC) – not to be confused with Johne's Management Ltd – was established in 2008 to coordinate research into the disease. It has been wound up after eight years supporting the development of cost-effective tools to manage the disease in New Zealand. The JDRC's work was reviewed at its final workshop, held on 19 July.

THROUGHOUT THE EIGHT-YEAR life of JDRC, the deer industry has contributed \$610,000 of the \$10.4 million invested in Johne's disease (JD) research behind the farm gate. JDRC has been a joint venture between industry, government and the science community.

Consortium Chair, **Graeme Milne**, said JD was difficult to study, and while there had been no big scientific breakthroughs, the tools based on existing knowledge of the disease had advanced considerably and farmers were now much better equipped to manage its effects.

Following the winding-up of the JDRC, a Johne's Advisory Group will provide continuity into the future. The group will be managed by Beef+Lamb NZ, DairyNZ and DINZ and will monitor new information and research priorities.

Public health also a factor

Professor **Richard Whittington** from the Veterinary Science Faculty at the University of Sydney, said no link between *MAP* (the bacterium that causes JD) in animals and disease in humans had been proven, but still, more than 500 published papers mentioned the two. "Mud sticks," he said. Government authorities continued to monitor research in this area, showing that the link between JD and human health risk was at least theoretically possible.

Whittington said many countries have JD control programmes for animal health and welfare reasons, but the public health aspect is now also becoming a factor.

Some countries such as Japan and Norway were taking an aggressive approach to JD while in others, it was being left to industry to manage the risks. Disease control programmes in Australia had a patchy record, with various states "playing games" to maximise trade advantages and a complex array of measures being used. Whittington said the disease in cattle was mainly an issue in Victoria but it was now endemic in Queensland – something of a shock because it was thought the disease couldn't spread there.

Because some fairly draconian measures had been taken in Australia at times, farmers were understandably mistrustful when new disease control programmes were rolled out.

Whittington said Australia had problems with underfunding and an ageing workforce in its veterinary diagnostic labs, which posed challenges for the control of JD there. A similar situation exists in New Zealand. He said the future of JD control could lie in genetic analysis for early identification of animals that would become "super shedders" of *MAP* later in life. If they could be removed from flocks or herds at a young age, this would cut down disease transmission.

Big cost benefit from control

Marlborough vet, **Pete Anderson**, reported on a survey he'd carried out with sheep. JD cost the New Zealand sheep industry a very conservatively estimated \$25.3m a year, he said. It affected fine-wool breeds the most.

Anderson said the extra stress on farmers from having JD in their flock – especially when they were coping with drought – was an additional burden over and above the financial cost. He said the cost benefit of vaccinating sheep against JD was \$10.90/head for fine-wool breeds and \$1.60 for crossbreds, and that didn't take into account the production benefits from preventing subclinical cases. As is the case with deer, clinical cases of JD are just the "tip

continued on page 30

<text><text><text>

JDRC Day: continued

of the iceberg" he said.

On one farm he investigated, with 3,800 merino ewes, vaccinating yielded a total benefit of \$10,416. That calculation only accounted for ewe deaths – if subclinical effects here also taken into account, the benefit would be even greater, he said. If flock losses from JD were anything more than about 0.2 - 0.3 percent, then vaccinating sheep would start to pay for itself.

Ten years' progress

Johne's Management Limited (JML) Manager, **Solis Norton**, reflected on 10 years of progress in the deer industry's national control programme for JD. He said the disease is now widely spread through the industry but by and large at a lower level than before. While the disease was past the peak of its epidemic phase, it was not cured, he warned.

Norton noted that the many of the most JD-susceptible animals had been removed from the industry and the acute impacts were now being seen on far fewer farms.

(For a detailed summary of this presentation, see Solis's article opposite on page 31.)



JML Manager, Solis Norton (left) and JML Independent Chair, Geoff Neilson were both at the workshop. Photo: Phil Stewart.

Looking ahead

Fonterra's **Lindsay Burton** reviewed the achievements of JDRC over its life. He said the main outputs of the research during the eight years were better disease prevalence data, best practice guidelines, information about diagnostic tests, strain typing, a DNA archive for *MAP* and better epidemiological data on the risk factors, economic impacts and how JD behaves in a pastoral environment.

Longstanding principles of disease control were supported by the JDRC's work, including:

- eradication is not feasible
- importance of minimising exposure to *MAP*, protecting young stock from being infected by adults
- the need to cull clinically infected animals.

Lessons for deer from dairy herd experience

It was fitting that the last word should go to someone from the JD front lines: a farmer. Although **Brendon O'Leary** is a dairy farmer, the lessons he learned about controlling JD should also resonate with deer farmers.

He has a high-producing farm business at Gordonton, north of



Brendan O'Leary: JD control was challenging by ultimately successful. Photo: Phil Stewart.

Hamilton, running both autumn- and spring-calving herds. When he bought the property in 1995, his vet commented that it was converted from sheep in the 1960s and had experienced chronic JD in young stock.

O'Leary reasoned that he wasn't planning to keep young stock on the property so would not be affected, but in 2011, started getting clinical cases in 2–3 year-old cows. "We put their loss of condition down to the stress of their first milking, but when we called in the vet they diagnosed Johne's just about straight away."

Soon after he was invited to be part of a trial to help develop better management tools for controlling JD. (One of the people involved was Jaimie Hunnam, the inaugural manager of JML.)

When the herd was tested in 2013, 8 percent (30 cows) were classified as "high positives" and were culled. Even though they had high body condition scores they had to be culled – a hard decision. "You have to be aggressive – you can't be sentimental," O'Leary said.

Other animals that were positive for JD but not high shedders were tagged and managed separately. Cows that were positive but at a lower level were mated to a terminal sire and not used to breed replacements. In following years the number of high positive cows dropped significantly, and following their most recent test in July, there was just one suspect cow – the rest were clear.

Other measures to reduce the risk from passing JD to younger stock included:

- using only colostrum from young, uninfected cows to feed calves
- quick removal of calves from their dams after birth to a clean, dry home (sheds) before being taken to a runoff that is only for calves and yearlings (therefore minimising exposure to contaminated pasture).

O'Leary runs a closed herd, as he doesn't want to risk importing JD-infected stock.

Interestingly, once the impacts of JD in the dairy herd started to decline, a couple of other animal health indicators improved too: somatic cell counts in milk and BVD incidence. This is something else that mirrors experience in deer herds and shows how getting on top of one disease can have wider animal health and welfare benefits.

"We've got to a good place with JD control and will keep testing and culling where necessary to keep up the momentum. I'm proud of where we've got to today.

"If you're passionate about your animals and their welfare, you need to act. We've just got to get farmers on board with that message."

Reviewing ten years of JML

by Solis Norton, Manager, Johne's Management Limited

The national control programme for Johne's disease in deer completed its tenth season on 30 July. Milestones like these are useful lookouts from which to assess past performance and see what the future may hold.

AFTER ITS FIRST detection in the late 1980s, the spread of Johne's disease accelerated alarmingly, often with severe animal health consequences. A concerted effort was made by the deer industry to understand and control it, including the establishment of a national control programme, Johne's Management Limited (JML), in 2006.

As a result, there are now encouraging signs that the worst impacts of the disease are in decline. JML's national database of processed deer, a major survey last year, and recent scientific reports commissioned by the Johne's Disease Research Consortium all support this conclusion.

In light of this we can take a moment to reflect on some satisfying success.

The on-farm risk management plans with veterinary support and diagnostic testing offered by the Disease Research Laboratory (DRL) have undoubtedly played a major role in this decline. Promotion and communication will have contributed too, with farmers and the industry in general far more aware of the risks and their management.

Complacency is risky

But snoozing on the laurels is a risky business: Johne's disease is far from finished in deer. While it has comparatively less impact, it is now widespread across the majority of farms. The on-farm financial drain from subclinical and clinical losses persists and it can still be a major issue on previously unexposed properties. More broadly, it firmly remains a significant global animal health concern.

So vigilance is essential at the farm and industry levels. Without it, the gains we have made could be reversed. In response, JML will continue with its well-established monitoring systems and its assistance to farmers and veterinarians. Today we support about 300 farms and almost 40 percent of national venison production. We are seen with a certain envy by other New Zealand farming industries in which JD is also an issue.

But overall, the decline is good news, headlined by fewer outbreaks and presumably less total production loss. One might argue that JD in the deer industry is starting to head in the direction of JD in the dairy or sheep industries, where many farmers complain of perhaps 1 percent losses each year and complain even more about it not being serious enough to really do



Figure 1: Industry average for difference in carcass weights between young deer with lesions indicative of Johne's disease and young deer without lesions.

continued on page 32



AUGUST/SEPTEMBER 2016 31

Ten years of JML: continued

anything about.

One might also say that this is an ideal survival strategy by the bacteria causing JD – the same strategy that enabled its spread so widely throughout the world's ruminant farming systems, especially dairy; the same strategy that spurs international experts to recommend continued effective control; and the same strategy that means it is, in all likelihood, embedded in the deer industry for a good few years yet.

Subclinical effects remain

Even at this lower level of impact, subclinical effects on production remain. The carcasses of young deer with lesions are still about 5 percent lighter than those of their herd mates (see Figure 1). In mature deer this difference is 16 percent. And while the lesion rate across all deer has declined slightly over the years, it is unlikely to disappear altogether.

In addition to subclinical impacts, a small proportion of deer farms will still see significant clinical disease on occasion. This is because Johne's disease is exacerbated by stress. When times are tough, which they always are somewhere, it's more likely to rear its head. Being a smart kind of a bug, it makes hay while the sun shines, seeing great opportunity in the compromised immune system of its stressed host to breed up with minimal effort and, ideally, infect a few new hosts along the way.

Finding a way forward

JML has worked steadily to understand the nature of this disease in the deer industry. And being science and statistics based, it does not make these conclusions lightly or without due consideration. As our conviction has sharpened we've realised that what we've done in the past to good effect may need refinement for greater benefit in the future. We are looking hard at the components of our programme. Some have growing value to the industry, in particular the national database and the Johne's Consultant Network of veterinarians, while others may not. Options are being developed and a consultation process with DINZ, the New Zealand Deer Farmers' Association, and venison processors is underway. We will arrive at a way forward that the whole industry feels comfortable with and sees value in.

The deer industry can be proud of the progress it has achieved with Johne's disease – progress enabled by effective cohesion between researchers, DRL in particular, farmers, processors, veterinary practitioners, AsureQuality, and DINZ. This progress proves substantial change can be brought about – which is an important thing to keep in mind with the P2P programme really gathering steam now. And maybe there is a tinge of regret too, in that eradication remains a long-term hope. But this puts us in the same boat as the rest of the world, so we need not feel too inadequate. On the contrary, our risk management plan is well established and, it seems, genuinely effective.

Hawke's Bay DFA honour for Tony Pearse

An excellent day's activities at the Hawke's Bay "Feeding Opportunities" workshop on 2 August (see page 3) was capped off perfectly at the Hawke's Bay NZDFA winter dinner when DINZ Producer Manager, Tony Pearse, was inducted as a Life Member of the branch. The dinner was held at the historic St Vincent's church venue at Oruawharo Homestead near Takapau.

JOHN SPIERS, WHO announced the honour, said Tony had supported the deer industry in a variety of roles "for longer than I can remember".

"The DFA wouldn't have evolved into the organisation it is today, had it not been for your influence. We congratulate you for your support of the industry and your support of this branch."

In response, Tony said he was "so proud and honoured".

"There have been many ecstatic and exciting moments for me in this industry, and this is one of them."

Tony recalled his early connections with the branch when as a researcher at Invermay he worked with the likes of Ken Drew, Peter Fennessy, Jock Allison and Geoff Asher on the Richmond/ Wrightson deer performance project.

"It's all been about the extension and relationship with farmers. I've been privileged beyond belief to have known so many of you and shared both triumphs and sadnesses as the industry grows older and we lose people as well."

He said Hawke's Bay has been a leader in the deer industry with

the passion and excellence shown in what can be difficult farming conditions.

"I'm very humbled and proud to be an honorary Hawke's Bay deer farming personality."



Tony Pearse speaks at the Hawke's Bay NZDFA winter dinner after being inducted into the branch as a Life Member.