



Johne's disease and venison productivity report

2017/18 - 2021/22

Farm:	Deer Farm
Contact:	G A Smith
Farmer ID:	1243

Meat Company Supply Codes

Company	SupplierCode
Silver Fern Farms	GSmith

About this DeerPRO Report

This report has productivity and animal health information for deer from your farm. It is confidential and not distributed without your consent. We email updates automatically and on reqest.

It is quick, easy performance information for your deer unit with industry-wide benchmarks for comparison.

It is intended to complement other measures of hed performance such as reproductive records and replacements rates as well as support the Deer Health Review process. The Deer Health Review booklet is available from the Deer Hub on the Deer Industry New Zealand website (https://www.deernz.org/deer-health-review) It is a practical way to record and assess key performance indicators. These can be reviewed with your veterinarian or consultant to identify opportunities to meet your farm management goals.

Herd health, productivity, feeding, and genetics along with environmental management are at the core of successful deer farming. Getting the best of these is the focus of the Deer Industry's Passion2Profit programme which aims to support good farming practice and raise returns to deer farmers.

This report includes the following information, and industry benchmarks for comparison where appropriate:

- Tallies of young1 and mature deer processed and carcass weight produced
- Estimated dollars per head for young and mature deer2
- Kill profile of monthly tallies against schedule trend
- Rate of Johne's disease-suspect lesions
- Loss of carcass weight associated with Johne's disease-suspect lesions
- NAIT tag details of deer identified with Johne's disease-suspect lesions
- Also for young deer, averages for carcass weight, kill date, days to finish³, and growth rate⁴, as well as the percentage that kill out below 45kg.

Notes about report calculations:

Season: August 1 – July 31.

Industry benchmarks: These are explained on the last page.

¹Young Deer: less than 20 months old (killed before the end of their second winter). Based on age information provided by NAIT and venison processors. Deer 18-26 months old may be included in the 'young' deer if NAIT records for your farm are incomplete.

²**Dollars per head:** based on weekly schedule published by Agrifax and adjusted for the weight and sex of the animal. This estimate is NOT the actual amount you were paid. It does not include contract prices or other 'top ups'.

³Average days to finish for young deer: days from November 25th (estimated birth date) to slaughter.

⁴Average growth rate for young deer: grams per day from November 25th to slaughter, assuming birth weight of 10kg and dress out of 55%.

Cover image:courtesy Phil Stewart

Venison Production Performance

Young deer in 2021/22 season

Season Tallies for young deer

Tally	553
Average carcass weight	51.2
kg different*	-6.4
Average kill date	21/Feb/22
days different*	29

^a compared to industry average



Summary of production and estimated value for your young and mature deer*

	17/18	18/19	19/20	20/21	21/22
Tally (young)	620	466	850	652	553
Total carcass weight	32,492	24,746	45,700	33,870	28,332
Average \$ per head	531	499	409	285	376
Tally (mature)	152	59	41	6	32
Total carcass weight	10,793	3,525	3,516	448	3,760
Average \$/head	670	526	549	414	621
Tally (total)	772	525	891	658	585
Total carcass weight	43,285	28,270	49,216	34,318	32,092
Average \$/head	558	502	416	286	390

*see page 2 for the definition of terms in this table

	2017/18	2018/19	2019/20	2020/21	2021/22
Average carcass weight	52.4	53.1	53.8	51.9	51.2
Industry avgerage carcass weight	55.0	56.5	58.2	57.9	57.6
Carcass weight difference	-2.6	-3.4	-4.4	-6	-6.4
Average kill date	23/Dec/17	10/Mar/19	01/Mar/20	10/Jan/21	21/Feb/22
Industry average kill date	14/Jan/18	18/Jan/19	30/Jan/20	18/Jan/21	24/Jan/22
Average kill date difference	-22	51	31	-7	29
Average growth rate	219	188	188	196	223
Industry average growth rate	226	234	238	232	226
Growth rate difference	-7	-46	-50	-36	-3
Days to finish	393	470	462	412	453
Industry days to finish	415	414	421	428	438
Days to finish difference	-22	56	41	-16	15
Sub 45kg rate(%)	1.8	5.8	5.7	2.3	5.4
Industry rate	5.1	4.2	4.2	4.4	4.4
Sub 45kg difference	-3.3	1.6	1.5	-2.1	1.0
Lesion rate	0.0	0.2	0.5	0.2	0.4

Summary venison statistics for all your young deer*

• see page 2 for the definition of terms in this table

• see the next page of this report for these same figures split by young hinds and young stags

Production goals depend on good animal health. An animal health risk assessment is an easy and effective way of optimising time and money spent on the health of your deer. A guideline for this assessment has been created as part of the P2P.







Average carcass weight for your young deer (red line) and industry benchmark (blue band)

Estimated average kill date for your young deer and industry benchmark (blue band)

Farm systems and objectives for venison production vary across the industry. Still, virtually everyone can achieve heavier animals and an earlier kill by using sire stags with higher Breeding Values (BVs) for growth. Stags with EBVs of +24 (24kgs higher than average) can add 12 kgs to finishing weights compared with 'average' stags. A list of the latest sires with high growth BVs, and the studs using them is here: (https://www.deernz.org/deerselect). A video showing how the BV table can be used is here: (https://www.youtube.com/watch?v=OoJ2Pl-uXsA)



Estimated average growth rate for your young¹ deer (grams per day from birth to slaughter) and industry benchmark² (blue band)

Agrifax estimate of average dollars per head for your young¹ deer and industry benchmark² (blue band)



Percent of your young deer killed at less than 45kg and industry trend (blue band)





Calculating the best time and weight to process deer is complex. Change in the schedule, live weights, and feed costs/utilisation need consideration.

P2P has produced a deer growth tool <u>http://www.deernz.org/deer-growth-curves</u> which can help with this. It allows you to set targets for deer growth rates and monitor progress. It also lets you predict gross revenue from different finishing options. Strategic feeding options are available in the Deer Facts sheet on feeding finishing deer: <u>http://www.deernz.org/sites/dinz/files/DeerFact_SpringVenison_Web.pdf</u>

Surveillance for Johne's disease

AnimalTag	DateOfSlaughter	SexCode	age
942 000037787602	15/11/2021	S	young
942 000037789958	15/11/2021	S	young

Johne's disease can be successfully and cost-effectively controlled. It is best to incorporate control as part of a deer health review https://www.deernz.org/deer-hub/health/health-tools/ with your veterinarian. To contact veterinarians on the Deer Special Interest Branch of the New Zealand Veterinary Association email deer@vets.org.nz or contact DINZ Johne's monitoring service (0800 456 453, info@deerpro.org.nz) for details of their members in your area. They are located nationwide.

How to read the industry benchmarks

The benchmarks show the overall industry trend for young¹ deer. They are a broad representation because they are made up of all deer farming systems and all deer genetics. Keep this in mind when comparing your deer with them.

Using carcass weight as an example:

The carcass weights for the seasons' young deer (around 220,000 in 2017/18) are grouped together then divided into quarters from heaviest to lightest by the blue lines.

The bottom blue line (dashed) separates the lower quarter (lightest 25% of carcasses) from the lower-mid quarter (26-50%).

The middle blue line is the industry average.

The top blue line (dashed) separates the top quarter (heaviest 25% of carcasses) from the upper mid quarter (51-74%).



So in the example above the red line shows carcass weights from a farm were in the lightest quarter of all young carcasses in 2017/18, 18/19, and 19/20. But in 2020/21 they were heavier, falling in the lower mid quarter of industry production. Then in 2021/22 they were heavier again and passed the industry average carcass weight, but did not reach the heaviest 25% bracket.

young deer¹ - see page 2 for the definition of young deer.