



USE CASE

Value Opportunities in Monitoring Kill Sheet Data

FARMIQ®



Scenario

Many farmers refer to kill sheet data to try and gauge performance after sending a line of stock to a processor. The price per head is the main number farmers look at, alongside other key performance measures like carcass weight, distribution of weights, and sometimes the defects affecting the mob. Reviewing a singular kill sheet provides a good idea about a particular line of stock, but neglects the year-to-date or overall kill performance. There is also limited ability to compare how any of this relates to previous years' performance.

Combining total stock processed over a season, age group, breed, and so on can provide you with a true performance measure. By looking at key performance measures over the entire season we learn more about our true performance and identify any potential opportunities for gain. Simply being able to fall back on historical data is often enough to give confidence about future planning, meaning decisions are made faster and better outcomes are achieved.

In most farming situations farmers have an emotional attachment to where their stock ends up and they enjoy seeing the result.

Having all of your kill sheets in one place enables farmers to close the feedback loop and see the progress made from their review and alterations of farm management practices.

The satisfaction of gains observed through this process is a reward over and above the price received, as you can essentially see your management plan working.

Spring Valley proudly and loyally supplies all lambs to Silver Fern Farms, who automatically feed through kill sheet data to FarmIQ. Over the last four years, Spring Valley has processed 36,613 lambs through the Silver Fern Farms processing plants. With just a few clicks of a button, the processing detail relating to every single one of these lambs can be reviewed. This data provides Matt and Lynley with a great sense of power when it comes to reviewing their performance and looking for those incremental system gains.

Note: As we produce this use case, ANZCO has recently connected an automated kill sheet integration with FarmIQ, and Alliance and AFFCO can have previous kill sheets manually uploaded into the system.



Farm Details

Spring Valley Enterprises is located 9km northwest of Masterton in the Wairarapa. Owned and managed by Matt and Lynley Wyeth, with two block managers, they run this 15,000 SU property fairly intensively. Spring Valley has a fantastic reputation as a high-performing sheep and beef breeding and finishing business, finishing all progeny bred on-farm (~10,000 lambs and ~240 cattle). Totalling 1,455ha effective with around 320ha in crop annually, Spring Valley is continually looking for the next step in improving profitability. Already a high-performing operation, there are generally only small incremental opportunities that Matt and Lynley see through better recording and analysis of their farm data.

Approach

Although you don't require FarmIQ to gain kill sheet information, it does allow these results to be analysed in a fraction of the time and effort, and with a far greater level of accuracy. There has been no human input (in this case) in getting the information entered, with a very quick process run to turn the compiled information into a meaningful report.

With FarmIQ you can also input additional farm information to better analyse data, such as birth dates, sales dates, and liveweights, which helps complete the picture.

Without FarmIQ, you would have to merge multiple spreadsheets together, then combine other pieces of data within this, making it a very time costly and difficult process with a high risk of inaccuracies. The information in this use case is true – no assumptions have had to be made because of the direct input of data into the system.



Results

Through this kill information on Spring Valley we can see that our average sale weights are trending up from 18.3kg in YE 2018 to 19.1kg in YE 2021. Average kill dates are trending earlier, from the 27th of February to the 5th of February respectively, but with no impact on grading or faults (carcass defects). Simply knowing this information is valuable as it shows that what is happening on-farm is working to achieve ongoing improvement.

Graph 1: The overall trending up of the carcass weights over the last four years, while the percentage of faults is relatively consistent.

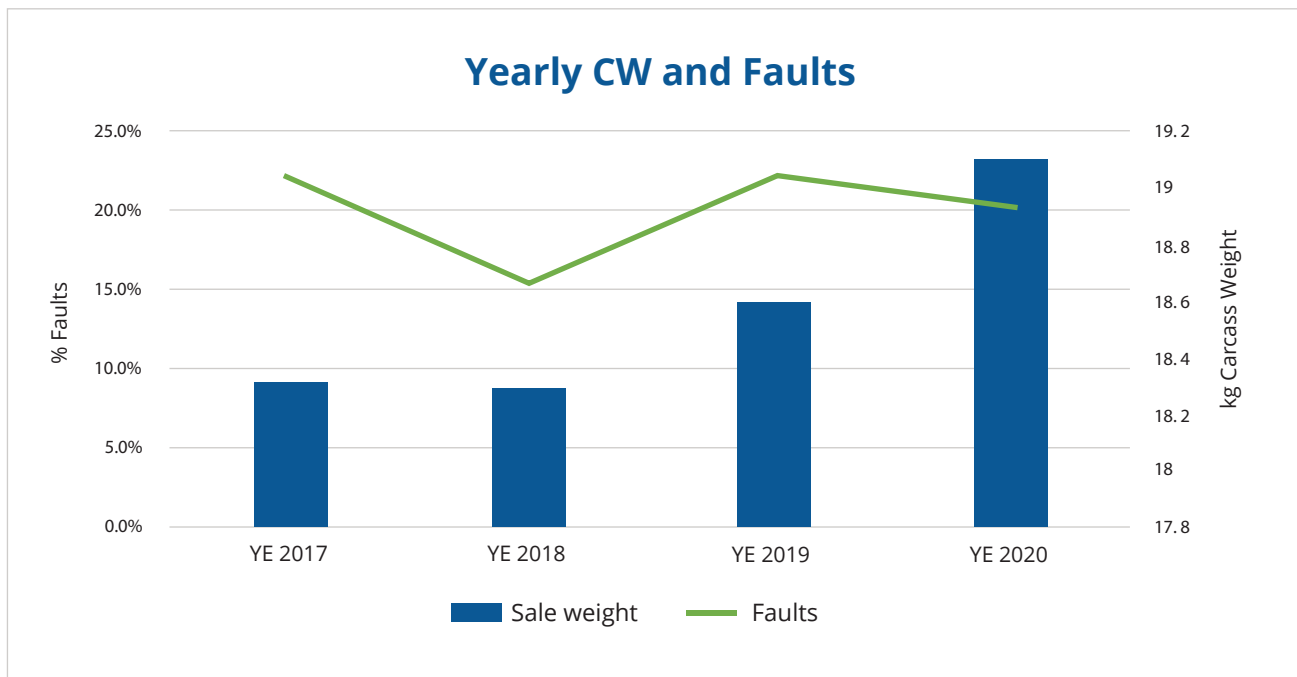
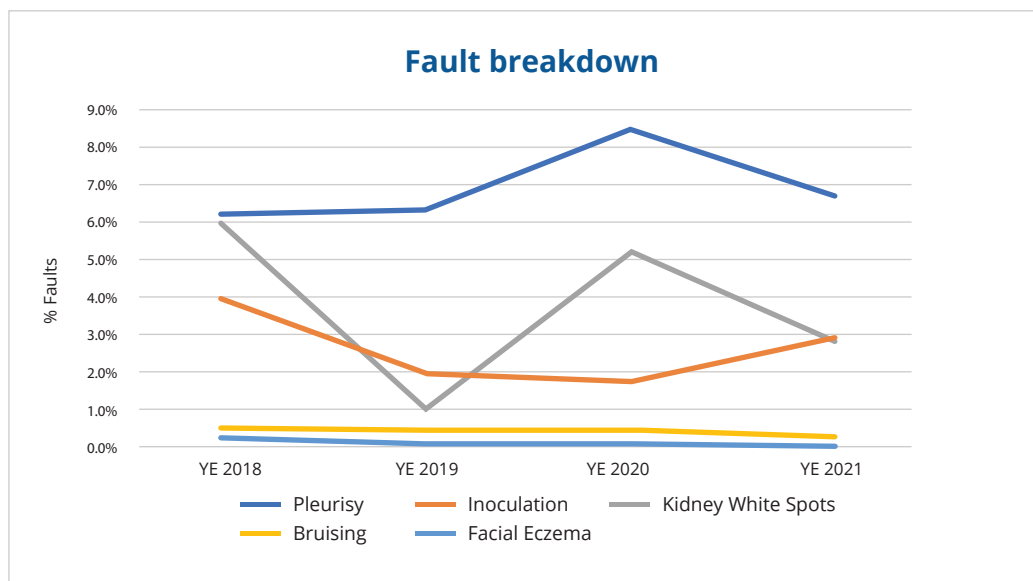


Table 1: The average processing date, sale weights and average days to process lambs over the last four years at Spring Valley.

	YE June 2021	YE June 2020	YE June 2019	YE June 2018
Average process date	5 Feb 2021	29 Feb 2020	12 Mar 2019	27 Feb 2018
Sale weight	19.1	18.6	18.3	18.3
Average days to process	157	181	192	179

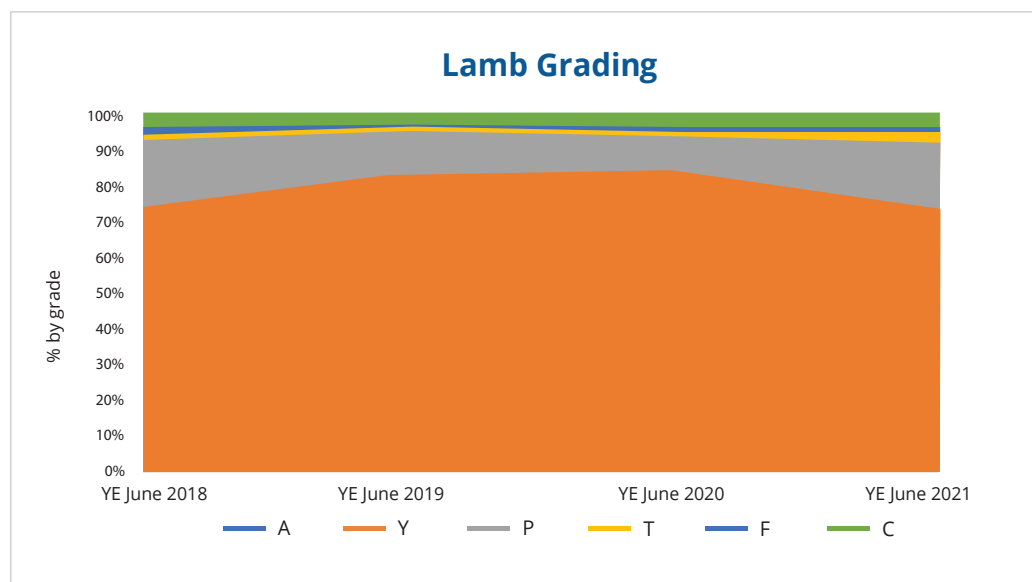
Using an average lambing date of the 1st of September each year, we can see that the trend is moving in the right direction, especially when considering the carcass weights are also improving. Typically, we could see the schedule drop by 10cents/week in February, therefore, over three weeks this could equate to around \$5.73/hd. This has added \$44,000 in total (or \$2,100/day for this time of year) to Spring Valley's lambs in YE 2021.

Graph 2: The trend in pleurisy, inoculation, kidney white spots, bruising and facial eczema of all lambs killed on Spring Valley.



If we break the faults down further by individual defects, we can better appreciate how these trend over time, rather than getting the quick snapshot that a single kill sheet can offer. With the hot, dry summers gripping the Wairarapa, pleurisy is a real issue and this information allows the Wyeths to track the effects directly and act with previous experience behind them. What livestock management changes can Matt and Lynley make to bring the incidence of pleurisy below 6% or even more in the future? The beauty of measuring over time (as can be easily achieved through FarmIQ) is that you gain the ability to manage the issue positively.

Graph 3: The percentage of each grade for all lambs processed over the last four years at Spring Valley.



Some fairly significant penalties can now be incurred if lambs fail to meet the desired grade, so it pays to ensure you use the information available to monitor how your total lambs are performing.

Using the information on Spring Valley and calculating an average penalty of \$0.37/kgCW (the average difference in the schedule for Spring Valley in the YE 2021 for all lambs processed), it cost Spring Valley \$3,763 for poor grading alone in the YE 2021. We should note that Spring Valley produces very good lambs with just 6.5% downgraded compared to the industry average of around 12%.



Summary

The crux of this use case is understanding kill sheet data to validate farm management practices and any alterations. We understand the information in this use case is already available through most processors, but most other methods are inefficient compared to FarmIQ, leaving farming businesses running blind to total carcass information. With FarmIQ's time and effort saving attributes, intuitive features and high accuracy, Matt and Lynley can track exactly how that part of the business performs with minimal effort.

The results over the last four years show that the average carcass weight of all lambs processed through Silver Fern Farms is, on average, increasing by 200g/year, with the trend in processing date edging earlier, which gives confidence and assures Matt and Lynley that what they are doing is working. If the recording and monitoring systems showed no improvements, they could review what they are doing and make adjustments.

As Spring Valley continues to lift their lamb carcass weight performance and reduce the days to process, they also see the value of tracking lamb carcass grading. The last thing they want is for the gains in carcass weight and average sale date to be negated by a higher rate of downgrades. As a result, Spring Valley continues to maintain a low level of grading downgrades, finishing 2021 year-end at 6.5% of carcasses affected and with no great surge in defects.

Matt and Lynley can easily extract all their lamb kill sheet data from FarmIQ in a format that allows them to rapidly analyse it and determine if things are on track or if some remedial management is required. Ultimately, this information gives them peace of mind.

Although this use case only looked at total lambs being processed, FarmIQ allows you to look deeper into a whole range of events that have happened on-farm, and how these play out at the processor.

These include:

- Crops used and any effects on carcass performance, i.e., yield and/or grade
- Males vs females to determine efficiencies in liveweight to yield and/or grade
- Trade lambs by suppliers
- Single vs twin vs triplet born lambs
- Lambing dates and the carcass effect

And you can rest assured knowing that this can all be repeated for cattle as well.

Use case provided by Sheppard Agriculture