Case study series - No. 5



MAKING SHEDS A 'SHEAR DELIGHT'

Stuart Mitchell, Cashel Vale, Bollon QLD

BACKGROUND:

Stuart Mitchell and his wife Ba run Cashel Vale, a 16,000 hectare property situated at Bollon, 600km west of Brisbane. With approximately 10,000 Merino sheep, the business is principally focused on wool production.

Stuart's work ethic and focus on delivering best practice across his business give Cashel Vale a valuable competitive advantage.

Being principally wool producers, shearing is a critical part of their operation. Attracting and retaining shearers is a major challenge facing the wool industry, with the number of shearers more than halving from 6300 in 2005 to 3000 in 2011ⁱ.

Stuart says creating a good working environment is critical to addressing the problem, and has the added benefit of improving the shearing operation.

"The shearing shed on our property was built in the 1950s



Stuart Mitchell outside the shed at 'Cashel Vale', QLD

and while it had 'good bones', parts of it were in need of an upgrade and we could see an opportunity to make a number of improvements," said Stuart.

"The design and layout weren't working nearly as well as they could for us. Everything was bolted down, which meant there was no flexibility to shift the configuration to meet the needs of the shearing team each season.

"A good example is this year, where we had plenty of burrs in the wool following a wet season. The wool handlers needed more time to work with the wool, and having everything fixed in place would have made it much more difficult.

"Around the same time we were considering upgrading the shed, we were going through the process of getting green tick accreditation for Cashel Vale and our wool.



The shearing shed at 'Cashel Vale', QLD

"The accreditation process was very comprehensive and had a strong focus on health and safety. It gave us a good reason to do a job hazard analysis on the property.

"The shearing shed was an obvious focal point and we started to look at the design, operation and working environment it provided shearers and shed hands.

With this in mind, around 10 years ago Stuart started planning upgrades to the shed to bring it into the twenty first century.

APPROACH:

"Each shed and each situation is different. For us, we knew that the upgrades we needed would be a reasonable investment, so we decided to stagger the improvements over several years to manage the cost.

Having been in many a shearing shed, Stuart had a clear idea of the changes he wanted to make, which he tested with his shearing contractor and regular shearers.

"I think talking to the shearers beforehand was critical. While I felt I had a good understanding of what was needed and would make a difference, it's the shearers that use the shed and their input is invaluable.

"We wanted to get good shearers back every year and the best way to get good shearers was to have good facilities for them to work in."

ELEMENTS:

In planning the improvements, Stuart wanted to address the following elements in the shed's design and layout:

- 1. Good lighting
 - Important for shearing and critical for wool classing.
- 2. Work space flexibility
 - Having a modular design means the layout can be adjusted to meet the changing needs of the shearing team.
- 3. Health and safety
 - Providing a safe work environment is a necessity, but addressing health and safety considerations can also make day to day work easier on the team and help to improve the longevity of shearers' careers.
- 4. Equipment
 - Having modern equipment in good working order helps to maximise the number of sheep shorn daily.

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While good airflow is essential in keeping the shed cool, this was working well and wasn't something Stuart needed to improve.

IMPLEMENTATION:

Stuart made the majority of changes over three years and has continued to make small improvements each year. This staggered approach enabled him to budget for and spread the costs over several seasons.

1st year:

The first year was focussed on modernising equipment essential to the shearing operation and involved replacing the original 1950s shaft driven gear with electric equipment. Stuart saw this as the most important step in enhancing the working environment for shearers.

"Pulling out the old shafting was the biggest improvement that we made safetywise and efficiency-wise, providing the shearers with smooth, high-quality gear.

"At the same time, we installed swings for the harnesses, helping to reduce the strain and stress on shearers. This means they work more comfortably throughout the day and pull up better for following days' shearing.



Having work space flexibility and modern equipment were essential to the shed's upgrade.

2nd year:

In the second year Stuart invested in the lighting to enhance conditions for wool classers and shed workers. Previously, wool classers had been supplying their own portable fluorescent lighting that encroached on work space in the shed.

Proper lighting enables wool classers to work more efficiently in moving fleeces across the table without straining their eyes. It also gives shearers a clearer view of the sheep being shorn, helping work towards a better clip.

However, this was not just a simple task of putting more lighting into the shed but was one of the more significant investments that Stuart made.



Proper lighting in the shed is especially important for wool classers.

"The old generator lines didn't carry enough power and due to relevant rules and regulations, we couldn't just run new overhead wires. So we had to run underground lines up from where the rural power line finished.

"While the investment was significant, it has had other pay-offs. An offshoot has been that we now have power in the sheep yards, allowing us to easily run pregnancy scanning on ewes without generators.

3rd year:



White walls improve lighting and help keep the shed cool



Modular bins help create a flexible work environment.

In the third year, Stuart painted the inside of the shed white to enhance the new lighting he'd installed the year before, the reflection brightening all working areas of the shed.

Shearers in Stuart's shed also say that having the shed painted white makes it cooler, with heat possibly reflected off the roof and exterior walls which are also painted a light colour.

"Apart from looking good, having white walls means that ceiling lights are more effective in brightening the shed."

In the same year, Stuart also set about custom making modular bins for the wool that sit on runners and can be easily moved around the boards.

"We wanted a modular, plug and play design where a shearing team could come in and adjust the layout to meet their needs and create an easy workflow and good use of space.

"If the shed workers' preference is to only use two or three bins they can push the others to the side.

"It provides a really flexible work environment that can be changed to meet the needs day-to-day."

Since then:

In the years following, while Stuart was working on gaining green tick accreditation for Cashel Vale, occupational health and safety (OH&S) improvements were implemented in the shed.

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OH&S requirements form a significant part of green tick accreditation, which saw Stuart install safety rails, signage, and reduce fire hazards.

"When we began to look around the shed we realised that there was work to be done with some bad exits. The loading ramp at the front and the main entrance didn't have any railings which posed a risk for workers.

"As well as installing the necessary railing, we placed signs to inform people which exits could and couldn't be used, stopping traffic from entering any potentially dangerous areas."

Smoking was another issue in the shed, posing a potential fire hazard and contaminants risk to the clip.

"It took a couple of years to encourage the crew to take smoko outside. Each year we increased the size of the sign and eventually managed to move them outside."

Other important OH&S additions to the shed included well-marked fire extinguishers and first aid kits for emergency situations.

INVESTMENT:

Investment in shed infrastructure has been made over a decade, enabling money to be spent in line with farm cash flow and be broken down into a per head figure for the flock.

"In the last ten years for every sheep that we've shorn in this shed we've spent approximately 40 to 70 cents on safety, equipment and maintenance improvements.

"The big ticket item was running underground power to the shed, which cost us approximately \$20,000 to install.

"Replacing the old shaft driven gear was \$12,000 and the biggest improvement we made for the shearers.

"Painting the inside of the shed was reasonably inexpensive and we were able to build the modular bins and safety railings ourselves on-farm, saving money.

"Signage was a reasonable cost, though we managed that by making purchases over time rather than all at once."

RESULTS:

Stuart says that measuring return on investment can be difficult in monetary terms; however improved efficiencies and safety have made the investment worthwhile.

"It was one of those things that we just had to do. It was a 50s shed that hadn't seen any improvements or modernisations made to it up to the point that we arrived.

"We wanted to create the best working environment we could for shearers, knowing that if we achieved this, we could improve the shed's efficiency overall and arguably produce a better clip.

"We have a really happy shed and the same guys are back every year. Having an above-average shed for the area also means we can expect an above-average job at shearing time."

Another measure of return on investment is risk management. Having OH&S measures in place means the property's liability is likely to be reduced in the case of an injury or accident.



While investment has been 40 to 70 cents per head, it has been a worthwhile investment for 'Cashel Vale' and its sheep operation.

IF YOU'RE LOOKING AT UPGRADING YOUR SHED:

Stuart says that if you are looking to upgrade your shed, one of the first things to do is talk to your shearers and see what improvements they think would benefit the shearing operation.

"We're lucky to have a good relationship with the contractor, and he or the shearers can tell me if there is something that could be improved and we can have a discussion about it.

"Shearers and shed workers will have a good idea of what can be changed in a shed to improve work flow and make their jobs easier.

"We also weighed up what we could do ourselves and what would have to be purchased externally. That way savings in one area could contribute to the more expensive items."

Stuart says that when it comes to safety specifications and regulations, it is worthwhile taking the time to do some research.

"Particularly regarding safety, it is worth doing a good amount of research to find out exactly what the regulations are. That way if an accident or injury does occur, you will have complied with all of the necessary regulations."

Visiting other sheds that have been upgraded and seeing what other producers are doing can also be a useful way of gauging what needs to be done in your own shed.

Often other producers who have made upgrades will have had similar issues and can give advice on what works and what doesn't, and the best way to achieve goals.

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MORE INFORMATION:

There is a lot of information available and Stuart recommends looking at the Shearing Shed Guidelines and other resources available on Australian Wool Innovation's website. State departments of primary industries are also useful for information on health and safety guidelines and standards.

For more information on upgrading your shed, useful information can be found on Australian Wool Innovation's website www.wool.com, or by visiting the following sections directly:

Wool Harvesting: http://www.wool.com/Harvest.htm

Shearing Shed Guidelines: http://www.wool.com/Harvest Shearing-Shed-Guidelines.htm



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Source: ABS Labour Force Survey, DEEWR trend data to November 2011. http://joboutlook.gov.au/pages/occupation.aspx?search=alpha&tab=stats&cluster=&code=3612