



MAKING SHEDS A 'SHEAR DELIGHT'

Magnus Aitken, Paraway Pastoral's Steam Plains Station, Conargo NSW

BACKGROUND:

Shearing is a big undertaking at Paraway Pastoral's Steam Plains Station, located 35km north east of Conargo in NSW. The 47,000 hectare property runs around 40,000 sheep, which are shorn twice a year.

When Paraway Pastoral acquired Steam Plains, the existing shearing shed was well over 110 years old and in a state of disrepair. The original blade shed design had been converted to support a machine driven model.

Shearing was done along the length of the shed, some 35m, which meant that shed hands had to walk up and down the length of the shed. The setup was far from efficient and also made a day's work much harder on the shed hands.

To bring the shed up to the standard needed to support shearing 40,000 sheep every six months would require a significant investment and an extensive rebuild.

The decision was therefore made to build a new shed, tailored to meet the needs of the operation. Creating a working environment that is not only safe and efficient, but functional and enjoyable is a core underpinning of Paraway Pastoral's operations.

Magnus Aitken has been the property manager at Steam Plains for six years and says this focus drove the planning process, design, layout and build of the new shed.

"Attracting and retaining shearers is one of the biggest challenges facing woolgrowers and the industry. Shearing should be no different to any other industry and we have a responsibility to provide good working conditions, as you would expect in any workplace," said Magnus.



Magnus Aitken, property manager "Steam Plains", standing in the shed built in 2010 by Paraway Pastoral.

Magnus led the project from start to finish, and while planning for the new shed began in 2006, the severe drought reduced sheep numbers and meant that the final design was not completed until 2010.

APPROACH:

With his background in the sheep industry, working in both WA and NSW, Magnus had seen the inside of many a shearing shed and had a good understanding of some of the key elements that would need to be incorporated into the design.

“We wanted to have a shed that was functional and efficient for shearers and for us,” said Magnus.

“In addition to visiting a number of sheds, we thoroughly read through the ShearSafe Manual and got as much information as we could from Australian Wool Innovation (AWI) and other sources on the latest innovations in shed design and what was considered critical in terms of shearer safety and good working conditions.

“Consulting with our shearing contractor and shearers was also important in informing key elements of the design and layout.

ELEMENTS:

Horseshoe design

“With so many sheep to be shorn every six months, we wanted to ensure that we could get through shearing in four weeks. This meant that we needed to have ten shearing stations, plus an eleventh to support a left handed shearer, which we’ve had on our regular team for years.

“From an efficiency point of view, with so many stands we needed to have a horseshoe layout to keep the shed together, with the classing tables in the middle. The furthest distance from the board to a table is about six to eight steps.



Utilising gravity

A shearing operation is hard work and Magnus has incorporated features that use gravity to the shearing team's advantage. This approach resulted in a shed that operates on three levels.

Magnus says the plan was always to have a raised board shed, which along with the catching pens, makes up the top level.

The catching pens are slightly sloped, with the wood planks running lengthways. The sheep naturally stand facing away from the

pen doors, with their heads 'uphill'. When the shearers come to drag a sheep for shearing, they are already pointed in the right direction and are simply tipped and dragged downhill, making the process efficient and easier on the shearer.



Raised boards make for easy wool handling

The shed hands work one level lower on the classing and sorting floor. This means they don't have to bend down to pick up the wool. The raised board allows shed hands to lean in to collect the fleece with minimal strain on the back.

The bins are on casters and once full can be rolled over to the edge of the floor and tipped into the wool bin on the level below for baling.

Magnus says the workflow is smooth and although they have a relatively big team at shearing time, everyone has enough space to do their job well.

"It also works well for the sheep. We're able to load them into the shed at the upper level and once shorn, they move down the chutes to a catchment area below where they can be drenched.



Bins on casters make for easy movement around the shed (above left) and can be easily tipped into the wool bin on the level below for bailing (above centre and right)

Enough space

“We wanted the shearers and shed hands to have enough space to easily move around and do their jobs. This led us to placing more than the minimum required amount of distance between each shearing station.

“The shearing platform is also wider than you may normally see, allowing shearers to move sheep around easily if they are having any hassles, without disturbing their neighbour. It also allows enough space for fleeces to be part-skirted on the board as the shed hands are going past.



Having enough space between shearers makes shearing and training easier

Lighting

“Getting the lighting right took some work. We wanted to create a natural light to aid in wool classing. We also wanted to prevent shadows being cast when shearers were leaning over the sheep to shear, or in any way over the wool classing tables.

This made the bulbs, type of lights and their placement all-important in achieving the desired effect.

Airflow

A lot of sheep to shear, a big team and weather conditions on the day can all add up to a hot shed. Keeping the shed cool is all-important for a comfortable working environment. Several elements help to keep the air flowing through the shed.

“We have Riverina shutters along the length of the walls and the shed is a couple of meters off the ground, both of which encourage airflow. Fans are located across the boards to keep the team and the sheep cool.



Riverina shutters and a slanted ceiling with openings help create a comfortable and cool shed.

The ceiling is also slanted, with openings in the roof that allow the hot air to escape. The end result is a comfortable and cool shed.

Facilities

Paraway has also invested in high quality facilities beyond the shearing shed that form an important part of the workplace environment.

“Aside from the shed, we’ve been rebuilding the huts and bathroom facilities so our shearers quarters are in really good condition. We’ve also installed a new kitchen, so the team has a much nicer place to eat and the cook has a good setup to work with.



New facilities for the shearing team at Steam Plains

Health and safety

With such a strong focus on creating a good work environment that is safe, efficient and productive, health and safety considerations underpinned much of the shed design and elements that were incorporated in the build.

In addition to the elements outlined above, this also included the height and width of the shearing board and classing tables, placement of equipment, multi-directional design of the gates in the catching pens, safety railings, warning signs, mounting points for the use of harnesses and so on.

RESULTS:

The objective behind building a new shed and investing in supporting infrastructure for the shearers was not to deliver a dollar-value return on investment.

Magnus wanted a well-functioning operation, and understood that people played a big part in achieving that goal.

“By creating an enjoyable work environment, you also get the most out of people and as a result a better job at the end of the day.

“Our wool handling and clip preparation is probably around 50 per cent better than what it was, and that’s enormous. The feedback we get from the people buying our wool is that the clip preparation is first class.

The response from shearers, shed hands and contractors has also been overwhelmingly positive.

“The feedback we get is that it’s a great environment to work in. If you provide good conditions for people they appreciate that you value the work they are doing. That’s what it’s all about.

Brian Sullivan has been shearing at Steam Plains for many years and says that the old long shed put much greater strain in the shed staff.

“If you had a shearer who was shearing with any pace down one end of the shed, it meant the shed hands spent the day running between the stand and the table. As a result, it was often difficult to have shed staff work two days in a row,” said Brian.

“It’s an absolute pleasure to come to places like Steam Plains, where they’ve not only upgraded the shed, but also spent money to do the huts, toilets and mess hut up. A shed like this is very practical and functional, and pleasant to work in.”

Magnus says that any of the elements incorporated into the shed at Steam Plains shed can be integrated into most sheds.

For example lighting is something that can be fitted into any shed; and sloping catching pens and chutes can be retrospectively fitted.

MORE INFORMATION:

For more information visit the ‘wool harvest’ and ‘shearing shed guidelines’ sections of AWI’s website:

<http://www.wool.com/Harvest.htm>

http://www.wool.com/Harvest_Shearing-Shed-Guidelines.htm

