

# THE SHEEP'S BACK 2017/18 BENCHMARKING SURVEY

SUMMER 2019 NEWSLETTER

## THE SHEEP'S BACK 2017/18 BENCHMARKING SURVEY

This newsletter is devoted to The Sheep's Back 2017/18 benchmarking survey. Hopefully over harvest you will have time to read it and potentially work out how to extract a bit more money out of your sheep enterprise.

The Sheep's Back have benchmarked 120 of our member's sheep enterprises. We would like to thank those of you who filled the survey in and congratulate Ray Morgan of Northam, Mal Baxter of Woodanilling and Micheal & Mandy Harrington of Wagin who won the Myer vouchers. We plan for this to be an annual event so we will send out another sheep survey for the 2018/19 season.

Again the key message from The Sheep's Back benchmarking survey is that there's a very large range in production outputs per unit of rainfall. This survey was for the 2017/18 season and included 2.75 million kg of wool sold and 350 000 lambs marked. Of the 360 000 ewes mated, 74% were mated to a merino.

For those of you who opted to receive individual results this is a great way to benchmark your sheep enterprise. For those who completed the survey and requested individual data, it accompanies this newsletter. This means benchmarking not only against enterprises in your rainfall area but also against the rest of the State in terms of output per unit of rainfall.

With high sheep and wool prices, a small change in output can result in large changes to a business's bottom line. With this in mind, could your business improve its sheep enterprise for 2019?



Figure 1: Gross margin per dry sheep equivalent (DSE) over the past 10 years. Source Compass Agricultural Alliance/ Icon Agriculture.

Key outputs:

- Huge range in stocking rate per unit of rainfall
  0.3 DSE/WGHa/100mm GSR 4.3 DSE/WGha/100mm growing season rainfall (GSR)
- Huge range in wool production per unit of rainfall
  - 0 kg/WGHa/100 mm GSR 17.6 kg/WGHa/100 mm GSR
- Huge range in wool production per DSE
  2.2 kg/DSE 7.5 kg/DSE
- Lambing rates from 56% to 131%
- Huge range in lambs per ewe hectare per unit of rainfall
  0.1 3.8 lambs/ewe Ha/100mm GSR



#### **STOCKING RATES**

The range of stocking rates is expected to be extremely diverse due to the geographical difference of The Sheep's Back members. However, when plotting stocking rate per winter grazed hectare (WGHa) there is a considerable variation in any given rainfall for the 2017/18 season. The stocking rate per unit of rainfall ranges from 0.3 DSE/WGHa/100mm (Figure 1). This is a 14 fold difference for the same unit of rainfall.



Figure 2: Stocking rate against growing season rainfall for the 2017/18 season.

The stocking rate range is also demonstrated across similar geographical areas. An example is shown in the Kojonup Shire. Stocking rate ranges from 10 DSE/WGHa to 15.7 DSE/WGHa, wool production per hectare and lambs per ewe hectare also have a similar range. The rainfall and soil type do vary across the Shire but not by 57% as the stocking rate suggests.

There are many reasons why there is such a large range in stocking rates given similar rainfall. Some of these reasons are valid but many are not. Listed below are some of the potential reasons:

- Soil type
- Lambing time
- Sheep type
- Flock composition
- Business debt levels
- Age of operator
- Enterprise mix
- Mindset

There is a range of stocking rates for any postcode across WA. It is unlikely that any of these reasons result in a 50% reduction in potential stocking rate in a small geographical region. If your sheep enterprise is on the lower end of the potential stocking rate, do you know the reasons for this? Rather than backing off stocking rate because commodity prices are high, aim to get the higher output per head at your current stocking rate. For this to happen the sheep must be kept in condition score 3.

#### **WOOL PRODUCTION**

There is a substantial range in wool production per head and also wool production per unit of rainfall. The average wool cut was 4 kg/DSE but the range was from 2.2 kg/DSE to 7.5 kg/DSE (Figure 3). This is a large difference in production per head and when multiplied by the current wool price is a significant amount of money.



Figure 3: Wool production per DSE across different rainfall zones.

The wool production per hectare is driven by the stocking rate and to a lesser extent the wool production per DSE. The range of wool production is 52.5 kg/WGHa to 1.3 kg/WGHa which is expected given the geographical differences. However what is surprising is that wool production per unit of rainfall ranges from 1 kg/WGHa/100 mm GSR to 17.6 kg/WGHa/100 mm (Figure 4).





Figure 4: Wool production (kg/Ha) against growing season rainfall for the 2017/18 season.

There is a large difference between the highest wool production per unit of rainfall and the lowest. A proportion of these differences is expected due to different flock composition between members. Examples of this are keeping wethers to an older age compared to selling them as lambs, or mating a higher proportion of ewes to prime lamb sires meaning less merino lambs and hoggets to shear.

#### LAMB PRODUCTION

Continuing with the theme, there was also a enormous range in lambing rates from 56% to 131% over various rainfall zones and various stocking rates (Figure 5). The majority of lambing rates fell between 80% and 110% but this is very significant given the range exists at similar stocking rates. If two sheep systems are running at 7 DSE/WGHa but have lambing rates of 80% and 110% then the system with the higher lambing rate will produce an extra 1.4 lambs/ewe Ha. At a lambing rate of 80% this is 3.7 lambs/ewe Ha and at a lambing rate of 110% this is 5.1 lambs per/Ha.



Figure 5: Lambing rates against stocking rate (DSE/WGHa) for the 2017/18 season.

The bigger driver of sheep margins is not lambing rates, it is lambs/ewe Ha per unit of rainfall. The range is from 0.1 - 3.8 lambs/ewe Ha/100mm GSR. This is a 38 fold difference in lambs produced per unit of rainfall. This is demonstrated in Figure 6 as at any given GSR there is a large range in lambs/ewe Ha.



Figure 6: Lambs per ewe hectare against growing season rainfall for the 2017/18 season.



### TIME BASED INVESTMENTS

Aim for higher outputs while commodity prices are high. For many sheep enterprises it is unrealistic to aim at the top outputs per unit of rainfall. However, it is very realistic for your system to produce average to above average type numbers. Below are the average outputs per unit of rainfall from both the 2015 and 2017 Sheep's Back benchmarking survey.

- Stocking rate per unit of rainfall - 2.35 DSE/WGHa/100mm GSR
- Wool production per unit of rainfall
  8.8 kg/WGHa/100 mm GSR
- Lambs per ewe Ha per unit of rainfall
- 1.65 lambs/Ewe Ha/100mm GSR

Rather than backing off stocking rate because commodity prices are high, aim to get the higher output per head at the higher stocking rate. For this to happen the sheep must be kept in condition score 3. This may require filling the feed gap with purchased feed or preferably growing more green feed.

- Cultivate better clover & grass? The feedbase is the mainstay of our system. Can you look after your clover better, eg improving inoculant strains, improving soil constraints and planting new cultivars?
- Alternative pasture species. Kikuyu, saltbush, serradellas, long season grasses? Are there options that will allow the growing season to be extended?
- Fertiliser strategies on pasture. Can using more phosphorous or potassium grow more feed? Can more nitrogen be applied to pastures?
- Planting when moisture is available. Winter varieties, long season varieties, oats or just 'normal' pasture mixes?
- Liming pastures, sub clover rhizobia are very sensitive to low soil pH (below 4.5).

Every sheep enterprise has areas that can be improved to increase the sheep margin. These will be different for every business and identifying these is not always simple. Hopefully these simple benchmarks can start you on a path to improving your profit. As you have read, commodity prices are exceptional. This means small changes in the sheep enterprise can result in large changes to a business's bottom line.



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