In-Paddock Cattle Weighing – sorting out optimal set-up.

Producer case study: Bradshaw Family, South Stirling, WA

In-paddock weighing - why?

In Southern Western Australia, cattle producers growing out cattle in extensive paddock environments are not regularly weighing their animals. This can lead to delays in noticing any changes in growth rates. Typical systems require animals to be brought to a central set of cattle yards to be weighed – a time and labour consuming job that is inefficient if weight monitoring is the sole purpose of yarding.

Real time in-paddock weight data can mitigate this and may also prove useful in planning sale dates and numbers, and ensuring cattle are more likely to meet target weight specifications.

Project aim

This project, which recently commenced in early 2023, aims to demonstrate to producers by 2025, the value of in-paddock cattle weighing systems in terms of labour efficiency, closer monitoring of animal weights, and optimising compliance with target market weight specifications.

The Bradshaws go first!

The Bradshaw family, who run a mixed farming enterprise in South Stirling, Western Australia, were the first to get their hands on the newly purchased 'Optiweigh' in-paddock cattle weighing system in April 2023. Over the period of a few months, they were able to trial the Optiweigh system on three different classes of cattle (steers, heifers and cows & calves). The initial trial was with a herd of 75 steers over a 14-day period in a 70ha paddock. This was then followed by:

- 71 Heifers - 50ha paddock – 30 days
- 75 Steers (same) – 70ha paddock – 22 days
- 21 Cows & 21 calves – 50ha paddock – 15 days

Image 1: Terry Bradshaw explaining to local farmers the Optiweigh set-up and benefits at a field walk, July 2023.

Ironing out the bumps

As when trying anything new there were a few things that had to be tweaked to generate weight data that was useful to the Bradshaws. Firstly, it seemed that the steers required some time to 'warm up' to the Optiweigh, with only a few entering the trailer per day in the first week. The positioning of

the Optiweigh in the paddock may also have impacted on herd usage. When the Optiweigh was moved closer to the water point (dam) after a week, the daily number of animals entering noticeably increased. The compounding influence of having the Optiweigh in with the herd for only two weeks made this initial set of data difficult to use. It was also apparent that the type of lick/attractant that was used to lure the cattle into the Optiweigh played an important role (for the Bradshaws' cattle anyhow!). In the end it was the sweet loose lick recommended by the Optiweigh manufacturers that seemed to work best.

Lessons learnt

Once some of the finer details had been sorted out (i.e., the location in paddock, the lick, the time left in with cattle), the Optiweigh system started to generate data that was useful. Image 2 shows a graph of the weight data generated when the Optiweigh was placed in a 50ha paddock with a herd of heifers. The individual dots represent the weight data of each animal that entered the Optiweigh, and the line is the average weight of the herd, generated from the individual weights. Ideally, the more individual animals using the Optiweigh, the more accurate the average.

The economics

The Bradshaws were asked to complete a survey in order to capture data that could be used to undertake an economic analysis and demonstrate the dollar benefit of the in-paddock weighing system. The key findings were:

- The Optiweigh was a positive investment with most of the benefit derived from reduced labour costs (estimated at $5,640/year).
- Assuming the Optiweigh has a life of 15 years, it was determined that it would take 10 years to pay the system off.

Next steps

This MLA-funded project will continue through to 2025 with further trialing of the 'Optiweigh' in-paddock weighing system with different classes of cattle, and various paddock sizes and attractants across farms in the Southern Region of WA. At project completion, local producers will have information on how to optimise cattle usage on-farm, as well as information that informs the economic decision of purchasing a system such as this.

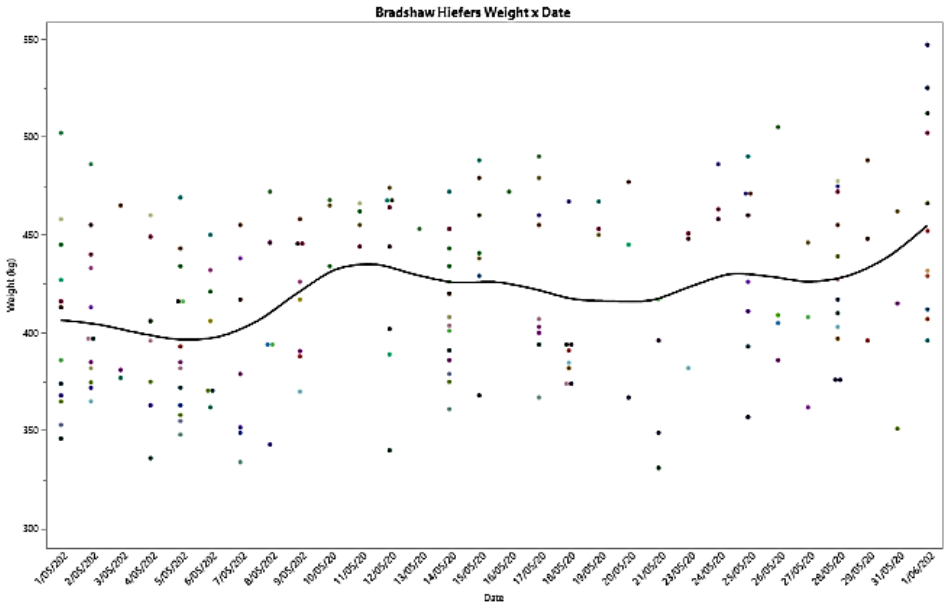

Image 2: Optiweigh weight data output for the herd of heifers – 1 May until 1 June 2023. The individual dots represent each animal, and the line represents the average weight of the herd.

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