

Understanding weight gain in background cattle in the West Midlands Region

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Key Messages

- Animals that were under 280 kg at induction to backgrounding generally gained weight at the first weight event
- Generally, >50% of animals that enter a backgrounding system gained weight at the first weight event.

Background

Historically, pastoral stations have focussed on supplying the live export market with heavier animals that meet market specifications, while lighter weight cattle are sent to auction in the domestic market. An increasing trend is for pastoral properties to send lighter animals to the southern region to be 'backgrounded', or grown out, to heavier weights to enable access to the live export trade or entry into feedlots for future abattoir supply. However, the success of this approach revolves around reducing the amount of weight that is lost in the transition phase during transport from station and settling into the backgrounding property. The aim of this project was to quantify weight gain/loss in backgrounding systems for the first two months following induction in the West Midlands region.

Data was collected on cattle that were transported to the backgrounding region in 2018 and 2019 from multiple properties within the Pilbara and Northern Rangelands regions of WA, with the backgrounding properties located near Badgingarra in the West Midlands region. The cattle in this study were transitioned in the May to October period of each year and individual animal performance data was collected to monitor weight gain from induction at the backgrounding property for a period of approximately 2 months.

Results

The number of animals that gained weight between induction to the backgrounding property ranged between 35% and 97% (Table 1). The weight gain of Mob 1 and 2 was influenced by severe weather events during transportation and weighing while at the backgrounding property.

Table 1. The average daily gain (ADG) and percentage of animals gaining weight for the first three weigh events following induction to backgrounding properties in the West Midlands region. All cattle originated from pastoral properties in the Northern Rangelands and Pilbara regions of WA. Weigh events were typically covered the first two months following induction to the backgrounding property.

Mob name	Total head	First weighing		Second weighing		Third weighing	
		ADG kg/hd/day	% gaining wt.	ADG kg/hd/day	% gaining wt.	ADG kg/hd/day	% gaining wt.
Mob 1	32	-0.05	35%	-0.05	48%	0.22	60%
Mob 2	124	-0.15	34%	-0.06	50%	0.34	81%
Mob 3	54	0.27	61%	1.16	100%	NA	NA
Mob 4	62	0.04	56%	1.15	52%	NA	NA
Mob 5	135	0.32	97%	0.25	93%	0.52	99%
Mob 6	52	0.3	88%	0.21	92%	0.53	100%
Mob 7	115	0.34	93%	0.18	85%	0.54	100%

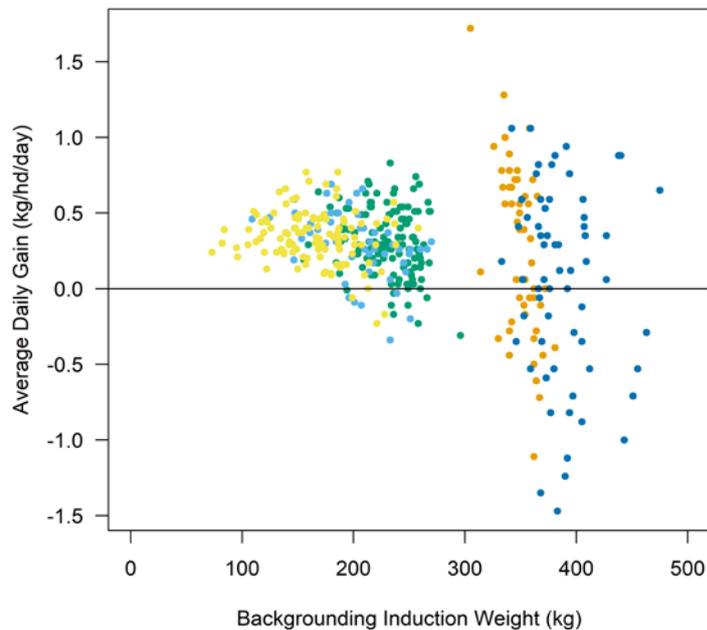


Figure 1. Relationship between the induction weight of animals when they reach the backgrounding property and the average daily gain of animals at the first weigh event following induction. Coloured points represent each mob of cattle followed in the project.

There was an identifiable relationship between induction weight of the animal at the backgrounding property and the initial weight gain of the animal at the backgrounding property. Animals that were under 280 kg were more consistent in gaining weight in a backgrounding system compared to heavier animals above 350kg. There was limited data for the 280-350kg weight range.

Discussion

This project has identified that at least 50% or more of the total animals do gain weight immediately following induction to the backgrounding property. This percentage does increase during the backgrounding period but has an impact on the total amount of weight gained during this period. This could have implications for the marketing of cattle from backgrounding systems, especially if a short timeframe for backgrounding is anticipated.

The relationship between induction weight of the animal and initial weight gain indicates that animals under 280 kg are best suited to entering a backgrounding system. This relationship requires further investigation as it is based on limited data but could lead to more consistent and profitable outcomes from backgrounding systems. The outcomes from this project have guided future research opportunities to improve the value and productivity of the pastoral beef supply chain in WA.

The full report can be found on the WMG website www.wmggroup.org.au

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