

VARIATIONS IN THE TIME CATTLE FAST BEFORE WEIGHING
AT A SALEYARD IN SOUTHERN QUEENSLAND

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SUMMARY

The times cattle fasted during each phase from yarding on the property to weighing after sale were recorded for a sample of 234 pens, with 2,342 animals, covering four sales at a saleyard in southern Queensland. Only 44% of cattle were offered water between arrival at the saleyard and the start of the designated curfew fast. The median time between yarding and weighing was 29.6 h, while cattle were without water for 22.8 h (median) and feed for 28.1 h (median) before weighing. Our findings indicate that water should always be available to animals at saleyards.

INTRODUCTION

Curfew systems operate at most saleyards in eastern Australia. When cattle are weighed after sale, it is common practice to fast (no feed and water) animals during a designated curfew period before the sale and through until weighing. The curfew aims to reduce the variation in liveweight due to differences in gut fill between groups of cattle with similar carcass weights. Both the rural and general communities have criticized the curfew fast, in particular because many cattle are not watered on arrival at saleyards and animals may be without water for long periods before the sale commences. In addition, the imposition of a curfew fast is costly and causes problems to saleyard and transport operators. Because of a lack of information on the time intervals that cattle fast between yarding on the property and weighing after sale, we investigated the problem at four sales at a saleyard in southern Queensland in 1979.

MATERIALS AND METHODS

The saleyard was one of the largest in Queensland with most cattle coming from southern Queensland. Every eight weeks a draw was made to determine the order in which livestock agents would sell cattle during that period. As the first agent to sell rotated weekly, pens used by a particular agent also changed. The curfew started at 2030 h and the sale at 0830 h next morning. Cattle were weighed after sale and in the order of sale.

The survey was conducted at four sales during June and August 1979. To ensure a representative sample irrespective of the total number of cattle, 16 pens were selected at random from each of the following groupings of pens: 1-100, 101-200, 201-300 and 301-400, but only six within pens 401-450.

The survey pens were inspected at regular intervals between 1700 and 2100 h on the eve of the sale. With the livestock agents' assistance, we recorded the numbers of animals, their owners, the times of arrival at the saleyard and of penning for sale, and whether or not the cattle had access to feed and water before penning. In turn, each owner was contacted to ascertain the times of yarding on the property and of loading for transportation, and whether or not animals were watered and fed. Cattle which came from the 12 closest shires (within 150 km) were designated local and those from other shires were called non-local.

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Inspection of the data showed that the various time intervals exhibited distributions skewed heavily to the right. Hence the median was considered to be more appropriate than the average, and non-parametric tests of significance were applied to compare medians from different groups.

RESULTS

The survey involved 234 pens, with 1,411 local and 931 non-local cattle. Table 1 gives the median times for each phase between yarding and weighing for all four sales. Trends were similar within each sale.

Local cattle were yarded for less ($P < 0.01$) time than non-local ones on the property and fewer were watered before loading (14.5 v 20.9%). They also spent less ($P < 0.01$) time at the saleyard before being penned for sale, but times between penning and weighing were similar for both groups. The median time between yarding and weighing was 25.7 h for local cattle and 52.8 h for non-local animals ($P < 0.01$).

Fewer local cattle were watered (26.2 v 52.8%) or watered and fed (2.3 v 16.8%) before penning than non-local ones. Despite similar median total times without water before weighing, there was much less variability between local than non-local groups. Local cattle were without feed for a much shorter ($P < 0.01$) period than non-locals. Figure 1 shows the distribution frequency for total times without water by source of origin and Fig. 2 total times without feed and water.

TABLE 1 The median times (h) and interquartile ranges (in parentheses) for each phase between yarding on the property and weighing after sale

Time interval	All sales	Source of cattle			
		Local		Non-local	
On property : yarding to loading	5.0	3.5	(4.0)	**	20.0 (10.0)
In transit : travelling	3.5	2.5	(2.0)	**	19.0 (15.2)
At saleyard : arrival to penning	2.0	1.25	(1.8)	**	3.5 (5.0)
: penning to weighing	18.4	18.0	(4.3)		19.4 (5.7)
: curfew to weighing	16.8	15.5	(4.0)	**	18.3 (4.4)
Total time : yarding to weighing	29.6	25.7	(6.4)	**	52.8 (25.6)
Total time pre-weighing : off water	22.8	23.3	(7.2)		22.1 (24.4)
: off feed	28.1	25.4	(5.9)	**	49.5 (25.4)

** $P < 0.01$

DISCUSSION

The similarity in the total times off water before weighing for local and non-local cattle resulted from few local cattle being offered water before penning, while most non-local animals had an opportunity to drink. Not only were both penned about 19 h before weighing, but the imposition of a curfew fast meant that cattle were without water for almost double the official curfew time.

An equally important finding was that the variation in total times from yarding to weighing between all groups was substantial, although greater for non-local than local cattle. Since substantial variation in liveweight can arise between groups of similar cattle fasted for various times (Wythes *et al.* 1980a; Wythes *et al.* 1981), as well as in dressing percentage and hydration status (Wythes *et al.* 1980b; Wythes unpub. data), it follows that considerable variations

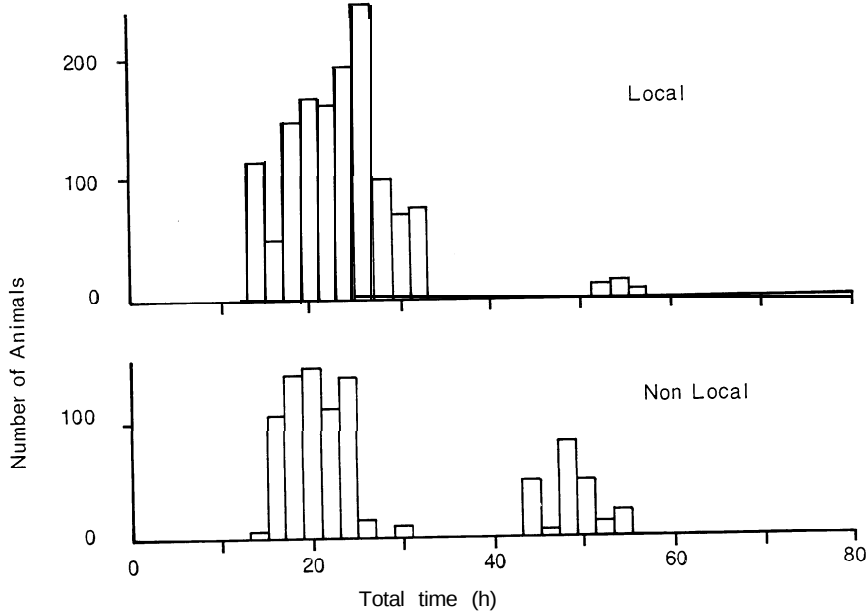


Fig. 1. Distribution frequency for total times without water by source of origin

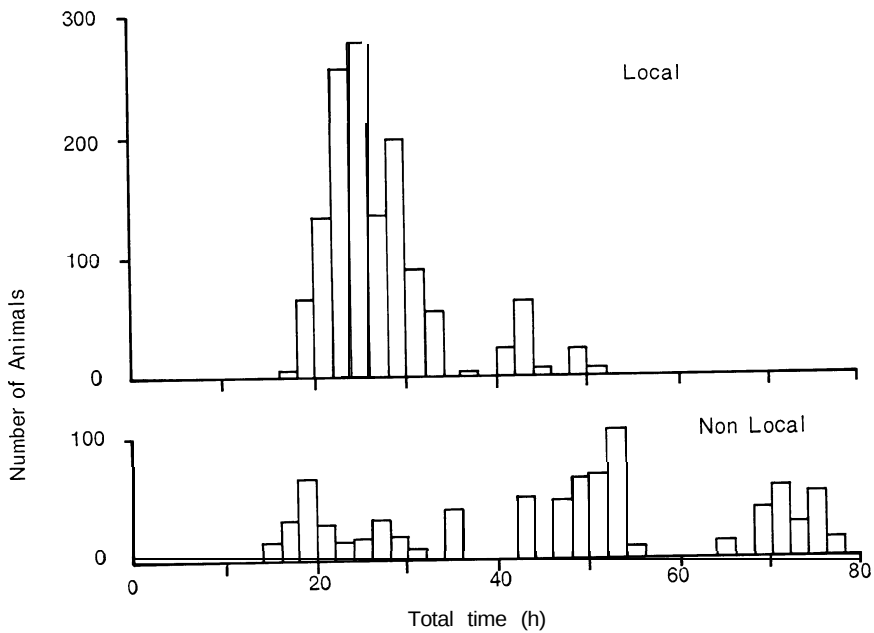


Fig. 2. Distribution frequency for total times without feed by source of origin

existed between all groups in our study. However, these workers found that differences were reduced greatly when all cattle had access to water. They suggested that a better way to achieve the aim of the curfew was to give cattle access to water from arrival at the saleyard until weighing. The variability in times between groups in our study affirms the need for water, although its provision appears more essential at saleyards selling a mixture of local and non-local cattle than those selling only local animals.

Despite median times off water of about 23 h, some local and non-local cattle were deprived of water for as long as 55 h. For humane reasons alone, the provision of water is advocated in all selling pens at all saleyards and particularly in view of the long periods of high temperatures in many parts of Australia. Wythes *et al.* (1980b) showed that animals can dehydrate markedly when denied water for long periods.

This survey has shown that cattle can be without feed and water for protracted periods before sale weighing with the present curfew fast and there is considerable variation in these times. Our results imply that wide variations in liveweight, dressing percentage and hydration status exist between groups of similar cattle, and in this regard support the arguments that cattle should have access continuously to water at saleyards to reduce these effects (Wythes *et al.* 1980a; Wythes *et al.* 1981; Wythes unpub. data). The effects of time of year on the variability of times off feed and water are unknown. In addition, our results demonstrate the need always to provide animals with water for welfare reasons alone.

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