

## THE INFLUENCE OF BODY WEIGHT, WITHER HEIGHT AND BODY CONDITION SCORE ON SALE PRICE OF THOROUGHBRED YEARLINGS AT PUBLIC AUCTION

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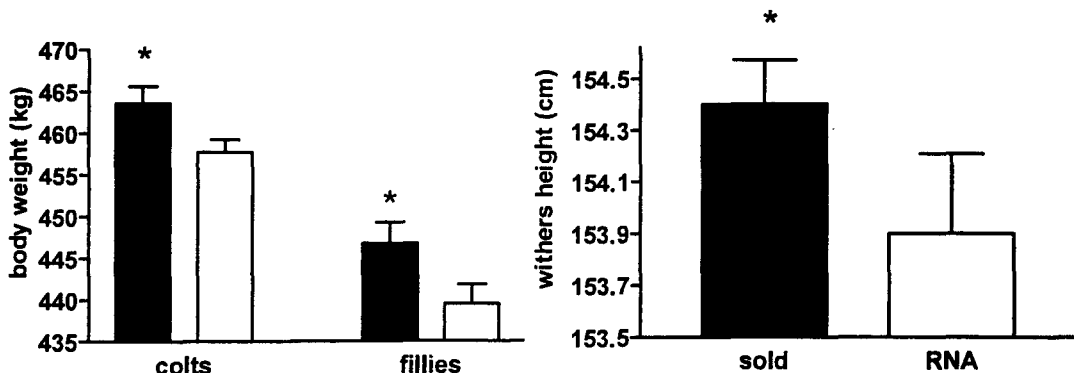
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Many factors affect the sale price of Thoroughbred yearlings at public auction including pedigree, conformation and racing performance of siblings. Anecdotal evidence has suggested larger yearlings sell for higher prices however there has been no published study to confirm this. To evaluate whether body size and condition affects sales price body weight, wither height, and body condition score (BCS) measurements were taken from 630 Thoroughbred yearlings within a month of sale by public auction at the Keeneland September 2003 and 2004 yearling sales in Lexington, Kentucky. Yearlings sold at these sales are separated into sale sessions based on their pedigree and conformation. Data were analysed depending on which session the yearlings were sold. One hundred and thirty five of the 630 yearlings (21%) were listed as RNA (reserve price not achieved) and data for these yearlings were analysed separately. Data were analysed using a paired student t-test. The average age of the yearlings at sale time was  $544 \pm 1.5$  (SEM) days. At the time of sale colts were heavier ( $461 \pm 1.7$  vs.  $443 \pm 1.7$  kg,  $p < 0.05$ ) and taller ( $155.2 \pm 0.5$  vs.  $153.4 \pm 0.2$  cm,  $p < 0.05$ ) however, colts had lower BCS than fillies (5.8 vs. 5.9).

Yearlings that sold above their session median were older ( $547 \pm 2.0$  vs.  $542 \pm 2.1$  days,  $p < 0.05$ ), heavier ( $457 \pm 1.7$  vs.  $448 \pm 2.2$  kg,  $p < 0.01$ ), and taller ( $154.7 \pm 0.04$  vs.  $153.9 \pm 0.04$  cm,  $p < 0.01$ ) but not fatter than those that sold below the median. When adjusted for the effects of age and gender, body weight, but not height was significantly greater in both colts ( $464 \pm 2.1$  vs.  $458 \pm 2.3$  kg,  $p < 0.05$ ) and fillies ( $447 \pm 2.5$  vs.  $440 \pm 2.3$  kg,  $p < 0.05$ ) that sold above their session median (Figure 1). It is likely that yearlings sold above the median price of the session in which they were assigned have a more heavily-muscled, athletic physique resulting from a combination of genetics, nutrition and exercise.

Yearlings that did not sell due to RNA were taller ( $154.4 \pm 0.2$  vs.  $153.9 \pm 0.3$  cm,  $p < 0.05$ ), but not heavier than those that sold when adjusted for age and gender (Figure 2). Seventy percent of the yearlings that sold had body condition scores of 6.0 to 6.5 while the remaining 30% had scores of 5.5. Only 49% of the RNA yearlings had scores of 6.0 with 51% scoring 5.5. These data suggest that the ideal condition score for a sales yearling is 6.0 based on a scale of 1 through 9. Yearlings presented for sale with lower condition scores may be less likely to meet the sellers' expectations.



Figures 1 and 2. Mean body weight ( $\pm$  SEM) of colts and fillies sold above (■) or below (□) their session median price (left) and wither height ( $\pm$  SEM) of yearlings that sold versus those listed as RNA (right). \* = Significant difference ( $p < 0.05$ ).