

Quarter Horse Growth Rates from Birth to One Year

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Extensive studies have been conducted on many livestock species to characterize growth rates and optimize production efficiency. Few studies, in comparison, have evaluated the growth rates of horses. The objective of this study was to characterize the growth of Quarter Horse foals from birth to one yr of age. Six foals (3 fillies, 3 colts) were born during March and April 2014 and housed with their dams in outdoor paddocks with access to shelter at all times. Foals had access to water, mixed grass hay and trace mineralized salt ad libitum throughout the study. Growth measurements (body weight (BW), body length (BL), wither height (WH), hip height (HH), heart girth (HG), lower leg length (LLL) and upper leg length (ULL)) were taken on d 0 and then every 7 (+/- 2) d for 1 yr. Data were analyzed using the MIXED procedure of SAS. A P value of ≤ 0.05 was considered statistically significant. Growth measurements and ADG had the greatest increase during the first 30 d postpartum. Fillies were heavier than colts at birth (d 0) and at 60 and 90 d postpartum ($P < 0.01$). WH and HH were highly correlated ($r = 0.99$). Although WH and ULL were highly correlated ($r = 0.96$), WH and LLL were not ($r = 0.65$) supporting the observation that ULL increased at a greater rate compared to LLL. There were no differences in WH between fillies and colts, except on d 0. Fillies had greater HH and HG compared to colts at several time points throughout the study ($P < 0.01$). These findings are in contrast to previous studies in Thoroughbred horses in which colts grew heavier and taller than fillies. This study highlights the need for more studies characterizing the growth of Quarter Horses and other breeds of interest.