Predicting The Time Of Calving

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As has been documented many times, if cows are fed late in the day, a higher percentage of calves will come during daylight hours. However, very precise records about the previous calving history of adult cows may help predict calving time even closer. Oregon State and Utah State Universities conducted an interesting study to determine whether individual beef cows display a repeatable pattern of calving time from year to year. Cows in this study ranged from 3 to 7 years of age and the number of calvings per cow ranged from 2 to 5, resulting in 523 parturitions for 201 individual cows. This data was gathered in late winter/spring calving seasons which began in late January and ended in late April. Cows were fed each day in late afternoon. Days were divided into 6 periods of 4 hours each. The percentage of cows calving within each period was: 6 AM – 10 AM, 34.2 percent; 10 AM – 2 PM, 21.2 percent; 2 PM – 6 PM, 29.8 percent; 6 PM – 10 PM, 8.4 percent; 10 PM – 2 AM, 4.4 percent; and 2 AM – 6 AM, 1.9 percent. By feeding late in the day, 85.2 percent of the calves came between 6 AM and 6 PM. Average time of day of calving was determined for each cow.

The difference between the individual's average and her calving time for each year was then calculated. The average difference for all cows was plus/minus 2.65 hours. Statistical analysis confirmed the average difference was significantly less than 3 hours. These results indicated that for this herd of cows, which was fed in late afternoon, the time that calving will occur may be predicted within about 2 to 3 hours based on the average time of day that a cow had previously calved. The authors noted, however, that alteration of feeding time could affect the predictability of calving time. Δ

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