In Heat on the Range—Those Sexy Montana Elk![TWS]

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Elk breeding behavior and time of mating have received increasing attention. Photoperiod, physiological condition, and age of cows, age structure and availability of bulls and human disturbance are factors believed to influence the timing of conception. Late breeding is believed to result in lowered calf survival and consequent management implications. Crown-rump measurements of elk embryos from cow elk harvested during late season hunts provided data about the timing of breeding and other aspects of reproduction. Sixteen samples (n=11- 248) of elk uteri

were collected from 6 locations in Montana between 1982 and 1994. A total of 1324 embryos were examined to determine breeding date distributions, fetal sex ratios, and twinning rates. Comparative data from 2 earlier Montana samples were also examined. Conception dates ranged from August 27 to November 11. The mean conception date for all Montana embryos was September 26. Of adult cows 250 conceived by September 20 and 95% by October 12. Sample means ranged from September 19 through October 4. Conception date distributions were positively skewed and leptokurtic and did not indicate late or disrupted breeding patterns. Conception date distribution for yearling cows was significantly later than for other age classes. Only 0.52% of the uteri contained twin embryos. The overall the sex ratio was 115 males:100 females, but varied between samples.