# REPRODUCTIVE WASTAGE AND LAMB SURVIVAL OF WESTERN WHITE FACE SHEEP GRAZING RANGELANDS

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The objective of the three year study at the New Mexico State University Corona Range and Livestock Research Center was to identify the periods at which reproductive wastage is greatest. Western Whiteface Ewes were randomly divided into four similar pastures in 2003, 2004, and 2005. Rams were randomly applied to each treatment at a rate of less than 25 ewes per ram for a breeding season of 34 to 40 d. In 2005, ovulation rates were measured in eight randomly selected ewes from each pasture via mid-ventral laparotomies 28 d after the breeding season began. Each year, one week before expected lambing half of the ewes from each pasture were randomly selected and brought in the corrals to be shed lambed in order to estimate the number of lambs born per ewe. Lambs born to the shed lambing ewes were ear tagged, weighed, and returned to their original pasture within 24 h of birth. Approximately 55 d after onset of lambing, lambs was docked, castrated, weighed, and ear tagged (pasture born lambs). Lambs were weaned at about 150 d after lambing began and all lamb IDs' and weights were recorded. Across all pastures and years potential lamb survival averaged 134, 121, and 113 percent of ewes exposed to rams for birth (shed lambing), marking, and weaning rates, respectively. Shed lamb survivability at birth was greater ($P < 0.001$) than shed lamb survivability at marking and weaning. Lamb survivability was similar from marking to weaning for both pasture ($P > 0.5$) and shed lambs ($P > 0.10$). Ovulation rates (1.75 CL per ewe) were greater ($P < 0.01$) than birth, marking, and weaning rates for 2005. Assuming ovulation rates represent potential lambs, combining prenatal and pre-marking lamb loss a total of 31 percent potential lambs were absent at weaning. (WS, ASAS Proceedings, 2006)