

**ABSTRACTS**  
**\* Author Presenting Paper**

**190** Age of calf at weaning of spring-calving beef cows and the effect on cow and calf performance and production economics. R. J. Rasby\*<sup>1</sup> and R. T. Clark<sup>1</sup>, <sup>1</sup>University of Nebraska, Lincoln.

Over a 5-yr period, spring calving cows were used in a carry-over design experiment to evaluate effects of calf age at weaning on cow and calf performance and economics. Management groups were early (n = 60, calf age 150 d, EW), traditional (n = 60, calf age 210 d, NW), and late (n = 60, calf age 270 d, LW). Cow body condition score (BCS) and weight at the last weaning date were different (P < .05) for EW (5.8, 583 kg), NW (5.5, 560 kg), and LW (5.2, 541 kg) groups. Pregnancy rate among groups were similar. Days on feed for groups differed (P = .001) and was 247 for EW, 204 for NW, and 164 d for LW steers. Average daily gain in the feedlot differed (P = .01) among groups and averaged 1.5 kg for LW, 1.4 kg for NW, and 1.3 kg for EW steers. Hot carcass weight was greater (P = .01) for EW (328 kg) and NW (332 kg) steers compared to the LW (321 kg) steers and fat depth was greater (P = .05) for EW and NW compared to LW steers. Percentage grading at least USDA Choice was greater (P = .05) for the EW compared to NW and LW groups. When carcass data for the NW and LW steers were adjusted to the same fat depth of EW steers, carcass data among groups were similar. Net income per steer at slaughter was greater (P < .001) for the EW (\$75.36) and NW (\$62.16) steers compared to the LW (\$10.09) steers. Adjusting the carcass data to similar a backfat reduced differences in net income. Replacement heifer costs were greater (P < .001) for the EW compared to NW and LW heifers. Annual cow costs were greater (P < .10) for the LW (\$443.45) compared to the EW (\$410.09) and NW (\$421.35) groups. Breakeven for each system calculated on a steer financial basis was lowest for the NW and LW groups and greatest (P = .08) for the EW group. Age of the calf at weaning affects cow weight and BCS. Net income in each management system is influenced by cow costs, mo of the year and weight that steers calves are purchased into the feedlot and finished steers are sold, mo of the year cull cows are marketed, and replacement heifer development costs.

**Key Words:** Cow/calf Performance, Systems, Economics