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*Summary only*

THE RELATION OF PASTURE ALLOWANCE TO CHANGES  
IN BODY CONDITION AND WEIGHT OF PREGNANT  
NON-LACTATING COWS

C. W. HOLMES, R. J. MCLENAGHAN, P. AUKO and  
R. NOTTINGHAM

*Massey University, Palmerston North*

Four pasture allowance treatments were imposed on groups of five cows with two replicates per treatment, by controlling the areas of pasture grazed daily by each group. The 40 animals were mixed Jersey, Friesian and Jersey  $\times$  Friesian cows which were about 7 months pregnant in mid-May at the start of the 37-day experimental period. Requirements for the management of the whole farm dictated that fatter cows should be allocated to the lower pasture allowances.

Pre-grazing herbage cuts gave an estimate of average total yield of 3620 kg pasture DM/ha (range 2580 to 4400). Cows offered 6.1 kg DM/day appeared to eat 5.5 kg/day and their liveweight (LW), measured after a fast of 18 h, increased from 350 to 379 kg, whereas their condition score (CS) decreased from 5.6 to 5.3 during the 37 days. Post-grazing herbage cuts gave a mean value of 390 kg DM/ha.

Cows offered 9.6 kg DM/day appeared to eat 7.9 kg DM/day, and their LW increased from 362 to 411 kg while their CS increased from 5.3 to 5.6. The mean value of pre-grazing yield of herbage was 690 kg/ha.

The results from these two lower pasture allowances suggested that an apparent intake of about 7 kg DM per cow daily would have been required for the maintenance of a constant value for CS over the 37 days.

Cows offered the two higher pasture allowances gained rapidly in LW and in CS, with post-grazing yields of 1000 to 1500 kg DM/ha.