

JAM 2013 Corrections

Author J. G. N. Moraes was inadvertently omitted from abstract 242 (Tuesday oral session: Production, Management and the Environment: Diet and Forage I). The corrected abstract is shown below.

242 Effect of stocking density in the prepartum period on health and productive parameters of Jersey cows. A. Dresch^{*1}, P. Silva², J. G. N. Moraes¹, H. Hooper¹, C. Spies¹, P. Lau¹, K. Lobeck², K. Machado¹, M. Endres², and R. Chebel¹, ¹*Department of Veterinary Population Medicine, University of Minnesota, St Paul*, ²*Department of Animal Science, University of Minnesota, St Paul*.

Objectives were to evaluate the effect of different stocking densities during the prepartum period on incidence of diseases and milk yield of Jersey cows. Within each replicate (n = 4), 2 pens were assigned to 80% stocking density (80D, n = 38) and 2 pens were assigned to 100% stocking density (100D, n = 48). Nulliparous and parous animals were housed separately pre and postpartum. Animals were scored for body condition and locomotion at enrollment, within 1 d postpartum (DIM), and at 35 and 56 DIM. Cows were examined within 1 DIM for retained placenta; 4, 7, 10, and 14 DIM for metritis; and, 35 DIM for endometritis. Data regarding displacement of abomasum, mastitis, and culling were recorded up to 60 DIM. Cows were milked thrice daily. Data regarding energy-corrected milk yield in the first month postpartum is reported. Pen was considered the experimental unit (n = 8/treatment). Dichotomous data were analyzed by logistic regression using the GLIMMIX procedure and continuous data were analyzed by ANOVA using the MIXED procedure for repeated measures. Pen was included as the random effect. Treatment was nested within pen and replicate and cows were nested within treatment. Stocking densities were 74.0 and 94.3% (± 0.3) of headlocks and 80.7 and 102.8% (± 0.4) of stalls for 80D and 100D, respectively. There was no effect of treatment on incidence of stillbirth (80D = 3.9 vs. 100D = 3.4%; $P = 0.50$), retained placenta (80D = 4.4 vs. 100D = 7.4%; $P = 0.13$), and endometritis (80D = 7.4 vs. 100D = 7.1%; $P = 0.65$). There was a tendency ($P = 0.10$) for incidence of metritis to be greater for 80D (21.5%) than 100D (13.9%). Treatment did not affect percentages of cows with locomotion score >2 at 35 ($P = 0.94$) and 56 ($P = 0.77$) DIM. Body condition score was not affected by treatment (80D = 2.97 ± 0.02 vs. 100D = 2.97 ± 0.01 ; $P = 0.91$). Percentage of cows removed from the herd within 60 DIM (80D = 4.4 vs. 100D = 3.0%; $P = 0.42$) and yield of energy corrected milk (80D = 27.56 ± 1.52 vs. 100D = 27.98 ± 1.50 kg/d; $P = 0.85$) were not affected by treatment. In conclusion, reducing stocking density did not improve health and productive parameters and unexpectedly tended to increase incidence of metritis.

Key Words: stocking density, prepartum, health