

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## PERFORMANCE OF NELLORE PREDOMINANCE COWS HERDS WITH DIFFERENT WEIGHTS

Gustavo Duarte FARIAS<sup>1</sup>, Ricardo Zambarda VAZ<sup>2</sup>, João RESTLE<sup>3</sup>, Liliane CERDÓTES<sup>4</sup>, Angélica Pereira dos Santos PINHO<sup>5</sup>, Pablo Tavares COSTA<sup>1</sup> Magali Floriano SILVEIRA<sup>6</sup>

\*corresponding author: Gustavo.dfarias@zootecnista.com.br

<sup>1</sup> Universidade Federal do Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, Brasil

<sup>2</sup> Universidade Federal de Pelotas, Pelotas, Rio Grande do Sul, Brasil

<sup>3</sup> Universidade Federal de Goiás, Goiás, Brasil

<sup>4</sup> Instituto Federal Sul Riograndense, Bagé, Rio Grande do Sul, Brasil

<sup>5</sup> Universidade Federal do Pampa, Dom Pedrito, Rio Grande do Sul, Brasil

<sup>6</sup> Universidade Tecnológica Federal do Paraná, Dois Vizinhos, PR, Brasil

The production of calves is the main stage of beef cattle breeding and, although it is usually less profitable than the backgrounding and finishing phases, it is the base of support for the maintenance of the activity. The objective of this study was to evaluate the performance of straightbred Nellore (N) and N x Charolais (C) crossbred cows with N predominance ( $\frac{3}{4}$  N  $\frac{1}{4}$  C and  $\frac{5}{8}$  N  $\frac{3}{8}$  C), of different body sizes at calving. Three groups of cows were formed according to their body weights using for this 0.8 standard deviation below or above the mean as limits. The groups were classified as Light ( $\leq 316$  kg), Moderate (from 317 to 400 kg) or Heavy ( $\geq 400$  kg). The evaluations consisted of assessment of body condition score (scale one to five) and weight of cows and their calves 24 hours postpartum at 63, 150 and 210 days. The difference in the mean weight of the groups of cows persisted throughout the evaluation period. The average daily gain of the cows differed from the calving at 210 days, with the performance of the cows of moderate weight was higher (17%) in relation to the heavy cows, but without differing from the cows Light. The cow's body condition score did not differ from calving to the end of mating. The calves of Heavy cows had higher body weight at birth and at 210 days, compared to the calves of the Light cows, not differing from the Moderate cow group. The average daily gain of the calves from heavy cows was higher compared to calves of the Moderate (12%) and Lightweight (19%) groups from birth to 210 days. In spite of the differences described, the groups were similar in body weight ratio of the calves / cow body weight, being the values 8.80, 8.65 and 8.10%, respectively, for the Light, Moderate and Heavy cows. Nellore predominance cows with body weight over 400 kg produce heavier calves at birth and with the highest average daily gain from birth to 210 days of age.

**Keywords:** body condition score, productive efficiency, *frame*, average daily gain

Promoção e Realização:



Apoio Institucional:



Organização:

