

## **FACTORS WHICH AFFECT REPRODUCTIVE TRAITS IN NELLORE CATTLE IN MATO GROSSO DO SUL, BRAZIL**

A. P.SOUZA<sup>1</sup>; J. C.SILVEIRA<sup>1</sup>; C. MCMANUS<sup>1</sup>; R Rumpf<sup>2</sup>; A. C.SILVEIRA<sup>3</sup>

<sup>1</sup>UnB; <sup>2</sup>Embrapa Recursos Genéticos e Biotecnologia; <sup>3</sup>UFMS

The Nellore breed makes up approximately 64% of the Brazilian cattle herd, and is therefore the main Brazilian genetic resource for the beef cattle in the country. The animals that originated the Nellore breed were introduced into Brazil, approximately 120 years ago, from India, and this breed has been shown to be extremely well adapted to tropical conditions. The data analysed was made up of 3598 reproductive records on Nellore type cows, collected from 1983 to 1999. The General Linear Model procedure of SAS was used to analyse calving interval and age at first calving. The mean age at first calving was 1291 days (43 months), which is lower than the national average for this breed. The calving interval was 479 days (16 months), indicating an annual calving rate of 76,2%. Both traits were affected ( $P < 0.01$ ) by years and month of calving. There is a tendency for both traits to improve with time. Calving interval was shorter for cows calving at the beginning of calving season, thereby allowing time for them to be inseminated at the beginning of the breeding season. Heifers calving at the end of the calving season tended to have lower ages at first calving. This may be due, in part, to the fact that these heifers are weaned off their dams at a strategic time, attaining sufficient weight to become pregnant during an earlier breeding season than the other heifers.

**Keywords:** age at first calving, calving interval, environmental effects