

Effect of age at first calving on the efficiency of cow utilization

S u m m a r y

The aim of the study was to analyse lifetime performance of cows according to age at first calving. Statistical calculations (GLM, FREQ and CORR PEARSON procedures of the SAS packet) were performed using milk, reproductive and culling data for 6928 cows of the active population from the Kujawsko-Pomorskie province, which first calved in the years 1998-1999. The following parameters were determined for each cow: lifetime milk field, life span, length of productive life, rearing duration, milk yield per day of age (utilization, rearing), calving interval, and number of calvings (number of live born calves). It was found that the age of cows on the day of first calving has a significantly affect the majority of lifetime performance parameters of the cows. Considering the efficiency of cows' lifetime performance. the recommended age of beginning the first lactation is 22.1-26.0 months. Moving the date of first calving to 26.1-28.0 months of age caused non-significant decrease in the efficiency of their utilization. Too early (≤ 22 months) and too late (especially after 30 months) beginning the first lactation caused a considerable reduction in lifetime performance and increases culling rate due to low milk yield and udder diseases.