

Reproductive and lactational performances, including length of productive life, were evaluated from records for 1960 to 1988 for a Jersey herd in coastal lowland semi-humid Kenya. The herd grazed natural pastures and until the mid 1970s received supplementary feeding. Mean performance included 31 months age at first calving, lactation milk yield (MY) of 1,788 kg in 3.3 lactations and a calving interval (CI) of 408 days. Mean milk yields declined from over 2,200 kg in the 1960s to about 1,500 kg in the 1980s with concomitant changes in calving interval, length of productive life and infertility. While annual genetic components of change in MY and CI were not significantly different from zero, the environmental components were large and significant ( $P < 0.01$ ) showing that the declines in performance probably resulted from decreased feed availability and less efficient disease control. Estimates of genetic parameters were consistent with those in the literature. With good management purebred Jersey cows in coastal lowland semi-humid Kenya were productive, but animal and herd productivity were highly dependent on management level which had a major effect on both milk yield and reproductive wastage.