

ABSTRACT

This study of the performance of the Jamaica Hope dairy breed was based on fifteen years of records from the Bodles Research Station, seven years of records from six farmer herds and one year's records from a further thirty-four farmer herds. A total of 5,508 lactation records were studied.

Parameters of production and fertility were arrived at. Mean 305-day milk yields were 708, 606 and 544 gallons respectively for the three populations. Peak yield in the fifth lactation was 31 per cent above first lactation yield. Butterfat per cent was 4.9. Calving interval was 439 days at Bodles and 405 days in farmer herds. Breeding 90 days after calving and the prevailing low conception rates influenced length of the calving interval at Bodles. Milk yield per day of calving interval was 18.3 lb. at Bodles and 17.9 lb. in farmer herds. Month of calving did not affect yield significantly.

Repeatability estimates of lactation milk yield, lactation length, calving interval and yield per day of calving interval were 0.55, 0.23, 0.04 and 0.52 respectively.

Age at first calving varied from 34.2 to 35.9 months. Gestation length was 281 days. Mean birthweight of calves was 56 lb. for males and 52 lb. for females.

In farmer herds some 90 per cent of cows were retained from one lactation to the next. On average, selected cows were superior in production to cows culled but the yield differentials were small.

Proven bulls of high relative breeding value were used most heavily. There is little doubt that testing of potential sires in herds other than that at Bodles is necessary.

Husbandry levels were generally low. Production in leading herds exceeded that in poor producing herds by 100 per cent. Substantial improvements in husbandry would be necessary if an overall improvement in breed performance is sought.