

# HERD RECORDING - ITS EFFECT ON DAIRY COW PRODUCTION

K.T. BEARD\*, F.V. BADHAM\* and A.A. MCGOWAN\*\*

Several studies (Badham 1974, Bradbury 1957, and Clark 1963) have shown milk fat production gains in continuously recorded herds, but the influence of herd recording may have been confounded either by managerial effects, seasonal differences or by industry trends. The present study involving 1,100 herds was designed to isolate and measure only the herd recording effect. To reduce seasonal effects and general industry trends, production of recording herds was compared in each of their first ten years of recording with that of the estimated mean production of comparable non-recording herd in the same year. This estimate of the production of non-recording herds was derived from the mean production of all recording herds which commenced recording in that year and would continue recording for at least ten years. This latter proviso was to improve the homogeneity of level of management between the farms from which the recording and "non-recording" data were drawn. The difference in milk fat production between recording herds and the estimate of non-recording herds (D kg) was related by the Michaelis-Mentin model to the number of years of recording (R).

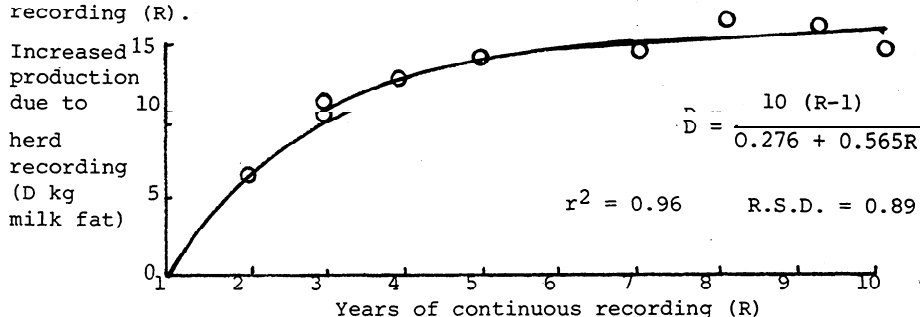


Figure 1. Effect of duration of recording on milk fat production.

This relationship indicates high early gains (12 kg butterfat per cow after four years) that asymptotically approach a maximum. By the tenth year of recording, production is 15 kg of butterfat per cow higher than in herds in their first year of recording. The total gain over ten years of continuous recording is about 100 kg of butterfat per cow.

Due to at least four years time lag between selection for breeding based on herd recording data and genetic improvement in production, the early rapid gains could not be due to genetic improvement in the recorded herds. A further project is investigating what management factors could be responsible for the improved production.

BADHAM, F.V. (1974). Dairyfarming Digest 21 (1) : 11,  
BRADBURY, C.J. (1957). Dairyfarming Digest 4 (2) : 20.  
CLARK, C.H. (1963). Qld. Agric. J. 89 (3) : 173.

\* Department of Agriculture, 3 Treasury Place, Melbourne Vic. 3002

\*\* Ellinbank Dairy Research Station, Depart. of Agric., Warragul Vic. 3820