

## HERD RECORDING TO RAISE DAIRY FARM PRODUCTIVITY

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## BACKGROUND

In 1972 one of us (J.K. Maher) began to use information from herd recording to improve his dairy farm's productivity. The situation in 1972 was:-

- . 181 ha of raingrown tropical legume based pasture which had been established since 1963 and 43 ha of kikuyu, paspalum and white clover pasture.
- . No irrigation.
- . 100 Jersey and Friesian x Jersey cows calved seasonally (May - September) and given only a 'contentment' supplement of crushed grain and chaff while milking.

Although 1972 production was well above district per farm and per cow levels (Table 1), analysis of the herd recording results revealed major losses of milk production from late winter until the spring flush. Subsequent feeding trials showed that milk production increased when extra energy was given, in the form of either grain or molasses, but not when extra protein was fed. Use of herd recording information thus resulted in the effective use of energy supplements without wasting money on added protein.

## 1982 SITUATION

Herd recording has become a key factor in the farm's management of:-

- . Pasture quality.
- . Grain feeding according to pasture availability and the individual cow's production.
- . Molasses feeding in both bail and paddock.
- . The A.I. mating program to allow selective mating of lower fat test cows to high fat test bulls.

The success of this management program is obvious in the present herd of 170 cows plus 40 replacements on the same area and in production per cow (Table 1). In the 10 year period, farm production increased 166 percent compared with an average increase of 101 percent for farms in the district.

Since the aim is to *profitably* increase total milk production and maintain legal minimum fat tests, it is worth reporting that the farm's output was three times the average with total overheads and production costs less than the averages for farms in the Australian Dairy Industry Survey.

#### DISCUSSION

Herd recording information can help define specific farm problems in both high and low production herds. Once problems are identified, solutions can be found and recording used to monitor the impact of those solutions both directly on the original problem and in other areas. It is important to remember that some solutions may cause more problems than they solve and continual monitoring is essential to the farm's management. In particular, by carefully watching responses to new practices, it is possible to pick areas that are having no benefit on production. Spending money on them is money "down the drain".

There may be other benefits that flow from adequate feeding. For example, on farms where feed supply is erratic, it may be more difficult to identify the best and worst cows on genetic merit. Consequently there is an indirect bonus for genetic improvement. Experience with this herd has confronted one of the major problems of herd improvement. It is easy to end up with cows of high milk production but low tests or low milk with high tests - reflecting the low or negative genetic correlations between milk yield and component levels. This highlights the desirability of basing breeding programs on kilograms of fat.

TABLE 1: Comparative Milk Production

	Gympie District Farm Average	Maher Farm
1970/71 production		
per farm (1)	82,000	222,000
per cow (1)	1,900	2,300
1980/81 production		
per farm (1)	165,000	590,000
per cow (1)	2,650	3,950