

Butterfat per Acre

A Summing Up of Research

THE article below by Dr J. F. Filmer, first Director of the Animal Research Division of the Department of Agriculture, who is to retire toward the end of this year, discusses major aspects of animal husbandry that have had light thrown on them by animal research workers in recent years. Dr Filmer emphasises that any conclusions and recommendations are his own, but that credit for the results on which he has drawn for his summing up must belong to the workers who got them and have approved them as he has presented them.

LAST year at one of the Ruakura dairies a herd of 40 cows produced 476 lb of butterfat per acre.

The average production for the Waipa County, in which Ruakura is situated, is approximately 240 lb of butterfat per acre.

What are the factors which account for this very large difference?

Cows on the uncontrolled grazed heavy stocked area at Ruakura's No. 2 Dairy.

THE first factor is the different basis on which the figures are calculated. The county average gives the production per acre for the area used for dairying and carrying bulls, dry cows, and replacement young stock as well as milking cows. The Ruakura figure gives the production per acre of grass actually grazed by milking cows only. When allowances are made for these differences the Ruakura figure should probably be reduced to approximately 376 lb of butterfat per acre.

Effect of Dry Stock

The very significant effect of dry stock on butterfat per acre is probably not appreciated by dairy farmers.

A bull probably eats about as much grass as a milking cow. If a farmer carrying 100 milking cows, 18 yearling

heifers, and four bulls goes over to artificial breeding and keeps only one bull for his yearlings, he can probably carry three additional cows, and if these average 300 lb of butterfat at 3s. per pound, the increase in financial return would be £135, which can be offset against the cost of artificial breeding.

The pasture consumed by each heifer before it begins to produce is approximately that consumed in a year by a milking cow. On this basis it can be calculated that if butterfat is worth 3s. per pound, a dairy farmer can afford to pay up to £45 for a down-calving cow which will produce 300 lb of butterfat per year. Similarly, if whole milk is being sold for 28.8d. per gallon, a town milk supplier can afford to pay up to £72 for a down-calving cow which will produce 600 gallons per annum.

The difficulty of buying good replacements and the risk of introducing disease may well be adequate reasons for factory suppliers at least to continue to breed their own replacements. They should, however, realise the importance of getting them down to a minimum by attending to the health of their cows and thus prolonging their lives.

