again harvesting was necessary to utilise the feed to advantage.

In 1939 the ewes were again increased, this time to 407, and experience this season showed that this was about the maximum carrying capacity, as only one small paddock was harvested. Although heavier lamb losses were experienced in August of this year due to very severe weather conditions, a satisfactory percentage was nevertheless obtained.

## Three Years' Results

The results for the three years 1937-1939 in fat lamb production from the 64 acres are shown in the accompanying table.

than one string to the bow on the dairy farm appeared to be worth investigating.

## Receipts

With fat lambs averaging £1 per head and butterfat at 8d. per lb., the receipts from the two sections of the farm worked out as follows.

Ten ewes with 100 per cent. lambs averaging £1 per head returned £10, compared with the same return from one cow with a butterfat production of 300lb. at 8d. per lb. On the one side, the wool, which has averaged 5/- per ewe, returned £2/10/- for the 10 ewes, and on the other, pigs returned

FAT LAMB PRODUCTION ON THE STRATFORD DEMONSTRATION FARM, 1936-39

Year.	Ewes.	Lambs docked.	Lambs sold to December 31.	Lambs not fattened.
1937	300	320	108	48
1938	351	381	181	50
1939	• 407	396	176	23

which could not be fattened each season was due to the high summer rainfall, which resulted in the pastures remaining soft after the lambs were weaned. It was noted that lambs which were not quite ready for killing off their mothers in December went back in condition repeatedly when weaned in early January if the weather was wet. However, under these conditions the results can be considered quite satisfactory.

The only supplementary feed necessary was a small amount of hay fed during lambing when the weather was exceptionally cold and rough. The topdressing applied to the sheep section was 2½cwt. of lime and 2½cwt, of super per acre each year.

It was demonstrated on the farm that 400 ewes can be carried in place of 40 cows, the average number carried on the other half of the farm, or that 10 ewes replaced one cow.

The trial was discussed and decided on when butterfat was 8d, to 9d, per lb. and the advisability of having more

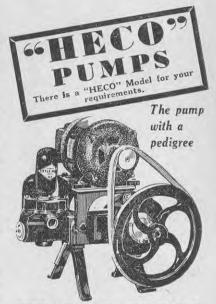
The considerable tail end of lambs an average of £2/10/- per cow. Thus, the gross receipts from 10 ewes were equal to the receipts from one cow. A study of the running costs of the shed in the case of the dairy herd showed that they were offset by the replacement cost of the ewes, plus the cost of dipping and shearing. While the replacement cost in ewes is paid in cash, the herd replacement cost is accounted for by loss of carrying capacity in cows due to the keeping of yearlings and heifers on the farm.

> When, as at present, butterfat is 1/5 per lb., the cow producing 300lb. of butterfat gives a return of £21/5/-, as against only £10 to £12 for the 10 lambs which can be fattened in her place

It would appear, therefore, that each 10 ewes which are carried on a clean and productive dairy farm mean either the replacement of one cow or a reduction in production equal to that of one cow. In fact, at present relative prices of butterfat and of lat lambs, COWS CAN RETURN JUST DOUBLE THE

MONEY RETURNED BY EWES ON DAIRYING LAND. In other words, dairy farmers who at present run a considerable number of ewes and fatten lambs on dairying land do so at a loss of gross and eventually of net income. There is undoubtedly a saving of labour in the replacement of cows by ewes, and this is the one real advantage.

The trial at Stratford was not concerned with the practice of fattening store lambs on dairy pastures to use up surplus summer growth to advantage, nor was it concerned with the control of weeds by sheep. The only weed dealt with effectively by the sheep on their section was ragwort, which they prevented from flowering, but in any case the few scattered plants on the dairy section are always easily controlled.



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