

Clinica mastitis is, however, not marked in the herd. The leucocyte assessment also is deteriorating from A to C.

Season.	Percentage, A Group Quarters: 0, 1, 2 Leucocyte Counts.	Percentage, B Group Quarters: 3 and 4 Leucocyte Counts.	Percentage, C Group Quarters: 5 and 6 Leucocyte Counts.
1938	43·4	34·2	22·4
1939	37·0	31·0	32·0

It is of interest to note the continuous history of infected quarters which, in the case of staphylococci infections, tend to change to streptococci:—

1938.	1939.
Six streptococci quarters .. ..	Four streptococci quarters. One dry quarter. One normal quarter.
Six staphylococci quarters .. ..	Three staphylococci quarters. Three streptococci quarters.

A tentative figure has been obtained by Mr. James to correlate the leucocyte assessment of gravity cream with the Breed count in milk. His average figures, which will be improved upon during the next year, are as follows:—

Assessment Figure.	Leucocytes per Cubic Centimetres Whole Milk (averaged).
0 .. .. .	90,000
1 .. .. .	170,000
2 .. .. .	370,000
3 .. .. .	1,450,000
4 .. .. .	3,500,000
5 .. .. .	8,870,000
6 .. .. .	19,730,000

*Sterility.*—Work in connection with the sterility problem in dairy herds has been undertaken by Messrs. T. A. Blake and A. L. Thompson, stationed in Hamilton.

Mr. Blake, as in past years, has taken particular interest in semen examination of bulls. During the year 103 samples of semen were taken and reported upon, 95 being from bulls, the remainder from horses and rams. Of the bulls, 27 were good, 27 fair, 26 poor, 8 bad, and 7 completely sterile.

The percentage of successful first services of fifty of these bulls is given:—

Fertility judged on Morphology and Motility.	Number of Bulls.	Percentage of First Service Successful.
Good .. .. .	18	63
Fair .. .. .	9	49
Poor .. .. .	12	37
Bad .. .. .	5	31
Sterile .. .. .	6	0

An experience is recorded by Mr. Blake where a bull known to be good after being placed in a herd already returning in a serious manner, failed on each of eight cows.

A record has also been made of one good bull over a period of seven years. This is worth placing on permanent record.

Examined.	Class.	Successful First Services.	Number of Cows.
		Per cent.	
October, 1932 .. .. .	Good	91	21
October, 1933 .. .. .	Good	82	29
October, 1934 .. .. .	Good	78	28
September, 1935 .. .. .	Good	88	46
September, 1936 .. .. .	Good	74	42
1937 (not examined) .. .. .	..	42*	52
October, 1938 .. .. .	Good	91	61

\* 82 per cent. including second service.

This bull in 1937 went to a herd troubled with temporary sterility and appeared to give less satisfaction than usual, but in his second round the cows held to him, and last year on his first service in this same herd he put up an exceptional performance.