

Table 3.—Herd A, Daily Average of Butterfat for Season.

Fed Group.			Control Group.		
No. of Cow.	1927-28.	1926-27.	No. of Cow.	1927-28.	1926-27.
	lb.	lb.		lb.	lb.
1 .. ..	1.483	0.927	1 .. ..	1.120	0.962
2 .. ..	1.405	1.003	2 .. ..	1.103	0.671
3 .. ..	1.329	..	3 .. ..	1.052	..
4 .. ..	1.316	0.948	4 .. ..	0.950	1.162
5 .. ..	1.262	0.937	5 .. ..	0.922	..
6 .. ..	1.078	0.856	6 .. ..	0.863	..
7 .. ..	0.999	0.893	7 .. ..	0.762	0.755
8 .. ..	0.994	0.870	8 .. ..	0.751*	..
9 .. ..	0.974*	..	9 .. ..	0.666*	..
10 .. ..	0.959*	..	10 .. ..	0.661*	..
11 .. ..	0.869	1.205	11 .. ..	0.646	0.814
12 .. ..	0.857*	..	12 .. ..	0.608*	0.986
13 .. ..	0.840	..	13 .. ..	0.464*	..
14 .. ..	0.798*	..			
15 .. ..	0.757*	..			
Average per day	1.061	0.955	Average per day	0.813	0.892

\* Heifers.

The accompanying graph (next page) indicates the average production of each group month by month. The graph also brings out clearly the statement made in the introductory paragraphs — namely, that a cow given a good start at the beginning of the season obtains a lead which she maintains to the end. Although all feeding ceased on 31st October, yet the diagram shows that the "Fed" groups maintained their ascendancy to the end of the season.

The variations between the three herds appear very wide, but on consideration the reasons are easily discovered. The rainfall undoubtedly played a part. In the case of Herd C there was a growth of young grass more or less throughout the season, while in Herd A there was little or no growth after Christmas and the summer heat rapidly dried up the grass. The ordinary supplementary feeding carried out in the winter and early spring was also a factor. Herd C received the best treatment in this respect, while Herd A received least. At the same time all three farmers were "doing" their herds somewhat better than the average in the district. In addition, in Herd C there was a higher proportion of late calvers than in the other two, as at least 60 per cent. of each group calved subsequently to 31st October. Thus those late calvers in the "Control" group commenced their milking-period when there was an abundance of natural food available; in other words, they were not stinted at the start.

Apart from these factors, however, the main explanation seems to lie in the type of herd. At the commencement of the experiment the three herds were each in average winter condition. When feeding ceased at the end of October there was no very marked difference in physical condition between the two groups in Herd A. In Herd B the "Fed" group were in decidedly better average condition than the