

nutrition throughout), high-low (good nutrition to first calving and poor nutrition thereafter), and low-high (poor nutrition to first calving and good nutrition thereafter). The results are reported in three stages, calf, yearling, and cow.

Calf Stage: Seasonal body weights of the well-reared (rotationally-grazed) and poorly-reared (set-stocked) calves for the last five years were as follows:—

BODY WEIGHTS AS AT 31ST MARCH

Seasons.	Well Reared.		Poorly Reared.		Difference.
	Number.	Weight.	Number.	Weight.	
		lb.		lb.	lb.
1944-49	94	385	104	288	97
1948-49	10	414	12	288	126
Twins (split) ..	12	408	10	325	83

Yearling Stage: Body-weight differences of the two groups of heifers were as follows:—

BODY WEIGHTS AS AT 31ST MARCH

Seasons.	Well Grown.		Poorly Grown.		Difference.
	Number.	Weight.	Number.	Weight.	
		lb.		lb.	lb.
1944-49	72	709	75	557	152
1948-49	10	753	12	543	210
Twins (split) ..	10	693	10	552	141

Cumulative data on reproduction behaviour are summarized below:—

REPRODUCTION BEHAVIOUR

					Well Grown.	Poorly Grown.
Total number of heifers	..	..	..	..	80	83
Number showing heats before mating ..	..	..	..	..	78	60
Number of recorded heats before milking ..	..	..	..	..	336	141
Number of mating heats—						
Total	..	..	..	..	134	117
Fertile cows	..	..	..	..	107	113
Number in calf	..	..	..	..	71	81
Services per conception—						
Total	..	..	..	..	1.89	1.44
Fertile cows	..	..	..	..	1.51	1.40

The poorly-reared heifers still continue to show fewer animals coming into oestrus before mating, substantially fewer total oestrus periods before mating, fewer mating heats, and a better conception rate than their well-reared mates. Culling rate for empty heifers was only 2.4 per cent. in the poorly-reared group and 11.2 per cent. in the well-reared group.