(2) Œstral cycle lengths of flushed ewes tend to be somewhat shorter than those of ewes not flushed.
(3) The practice of flushing leads to an increase in the ovulation rate within a period as short as one to two weeks, but for the best results a flushing period considerably longer than this is probably desirable.
(4) The increased ovulation rate which results from flushing ewes probably persists for some weeks after the flushing treatment is discontinued.
(5) Ewes which are flushed tend to be rather more difficult to get in lamb than ewes which are not flushed.

All the points enumerated above require verification. In addition, information is very much needed on the question of whether under New Zealand conditions ovulation occurs before the onset of the breeding-season proper, as determined by the time of occurrence of the first heat. If one or more such "silent" heats do occur, so that the sexual cycle is in fact established some time before the occurrence of the first heat, flushing treatments designed to bring ewes into œstrus earlier in the season would have to be imposed considerably sooner in the year than was the case in the present investigation.

During the current year it is proposed to repeat the investigation along lines similar to those followed last season.

Pre-lambing Nutrition of the Ewe.—A further year's results are available from the experiment to measure the effect of nutrition during the latter stages of pregnancy. During 1949 300 five-year-old Romney ewes, which had been mated to Southdown rams and run together since tupping, were divided into three groups five weeks before lambing was due to begin and fed on high, medium, and low planes of nutrition respectively. All ewes were run together again after lambing. The effect of the three treatments on the live-weight changes of the ewes during the month before lambing is summarized below: —

AVERAGE WEEKLY LIVE-WEIGHT CHANGES OVER LAST MONTH

Season.	High Plane.	Medium Plane.	Low Plane.
	lb.	lb.	lb.
1948	+5·0	+2·6	+0·8
1949	+4·3	+2·2	−0·03

The effect of the treatments on the growth of lambs over both seasons is summarized in the following table:—

GROWTH OF LAMBS

	Birth Weight (Weighted for Sex).			Weight at Ninety-eight Days.		
	High Plane.	Medium Plane.	Low Plane.	High Plane.	Medium Plane.	Low Plane.
Singles—	lb.	lb.	lb.	lb.	lb.	lb.
1948 season	10·3	10·2	9·9	62	61	62
1949 season	10·2	10·1	9·5	56	56	56
Twins—						
1948 season	9·2	8·8	7·5	52	52	51
1949 season	8·3	8·3	7·5	48	51	51

The lambs were slaughtered in three drafts, being picked as in normal fat-lamb practice. There was no difference between the groups in the proportion killed in each draft. Carcass weights and gradings were similar between groups, confirming the finding that growths of the lambs were little affected by the pre-lambing feeding of their mothers.