

Facial Eczema Precautions

EFFECT OF RESTRICTED GRAZING ON LAMBING

IN the prevention of facial eczema the greatest difficulty is experienced by the farmer whose pastures are all composed largely of ryegrass and white clover. This type of pasture is known to be extremely dangerous during facial eczema periods and its consumption must be reduced to a minimum. Experience in 1938 and other bad facial eczema years showed that even limited periods of grazing on that type of pasture may not be safe. During the period of rapid growth in autumns which follow dry summers it is therefore necessary that sheep should be concentrated at the rate of not fewer than 100 to the acre and fed such supplements as are available. Many farmers have expressed the fear that such treatment may seriously affect the health of sheep, and in particular may have disastrous effects on the lambing of ewes being mated at the time the restricted grazing is imposed. The results of the experiment reported in this article should help to allay such fears. It was conducted on the Department's Facial Eczema Research Farm at Manutuke, near Gisborne.

IN the autumn of 1946 the drought broke in the Gisborne district on March 2 and 2.5 in. of rain fell during the next four days. As conditions after this rain could have led to an outbreak of facial eczema it was decided to institute a programme of restricted grazing.

An acre of turnips which had been grazed previously by lambs but still had some fair grazing left was available, and 155 4-tooth ewes and 3 South-down and 3 Romney rams were confined in this field on March 8. On the next day they were given a change to Japanese millet and on March 10 and 11 were again grazing the turnips, at the end of which time the crop had been thoroughly eaten out. As the area of Japanese millet available was not great, rationing became necessary. On March 12 the ewes and rams were confined to a 1-acre pasture paddock, which was eaten bare within 24 hours. They were given 1½ hours' grazing each morning on Japanese millet and 1 lb. of hay a head each afternoon until the danger period was past. On March 20 the ewes and rams were returned to pasture.

Probably because the rain was accompanied by a cold change and was followed by strong winds, no facial eczema developed anywhere in the district, so the effect of the restricted grazing on the incidence of facial eczema could not be estimated. Judging by the general condition of the ewes and rams, no ill effects were caused by the treatment.

To determine the effect of the restricted grazing on the subsequent lambing it was decided to keep a count of the lambs born each day. As the rams were put with the flock on March 8, and the gestation period is

about 147 days, the first lambs were expected about August 2. The table shows the lambing figures and the treatment of the ewes at the time of tupping.

Date of tupping	Grazing at time of tupping	Lambing dates	Number of lambs
March	Before	August 2	4
8	Turnips	August 2	1
9	Japanese millet	August 3	3
10	Turnips	August 4	1
11	Turnips	August 5	1
12	Confined to a 1-acre pasture paddock	August 6	3
13		August 7	3
14	and allowed 1½ hours' grazing each morning and Japanese millet with 1 lb. of lucerne hay a head in the afternoons	August 8	6
15		August 9	2
16		August 10	0
17		August 11	4
18		August 12	2
19		August 13	1
20	Returned to normal grazing	August 14	3
		August 15	4
		August 16	5
		August 17	7
		August 18	4
		August 19	12
		August 20	8
		August 21	14
		August 22	12
		August 23	14
		August 24	3
		August 25	4
		August 26	1
		August 27	3
		August 28	1
		September 3-20	21
Lambs born dead or died			
		within first week ..	25 (16.2 per cent.)
Lambs marked 125 (80.6 per cent.)			
Ewes died or killed during lambing 6 (3.8 per cent.)			
Dry ewes 8 (5.1 per cent.)			

It happened that the rams were put out on the day on which precautionary grazing was begun. Up to August 5

the lambs born were probably from ewes tupped while grazing turnips and Japanese millet. Lambs born between August 6 and 13 would be from ewes tupped during the period of restricted grazing, and 21 lambs were born during that period, an average of 2.6 a day. Lambs born after August 13 would probably be from ewes tupped after they had returned to the pasture.

It is interesting to observe the marked increase in the rate of lambing between August 19 and 23; during that period 60 lambs were born, an average of 12 a day. That was almost certainly the result of the "flushing" effect of the good pasture on both ewes and rams, which apparently occurred 5 days after their return to unrestricted grazing. In any case that "flushing" effect would probably not have occurred before March 16, as March 11 was the first day on which it was possible to collect pasture with the motor mower. Therefore, it may be argued that the peak of lambing was not delayed by more than 9 days. The last lamb was born on September 20, and only 8 ewes (5.1 per cent.) proved empty.

It is not considered that the heavy mortality of young lambs was caused by the treatment, as it was observed on many farms throughout the district and has occurred to an alarming extent, during the past few years at least, in many districts.

It is realised that many farmers do not grow crops for sheep feed and therefore may have to depend on hay to maintain sheep during the period of restricted grazing. An experiment to test the effect of this treatment on ewes will be conducted during the coming autumn. During the autumn of 1945 70 2-tooth wethers were confined in a 1-acre paddock on March 4, 56 lambs were added on March 12, and both wethers and lambs remained in the paddock until March 18. About 1 lb. of lucerne hay each was fed daily from March 12. None of the wethers or lambs appeared to suffer any ill effect beyond some loss of condition. Forty-two of the wethers were killed at the works on April 17, having been grazed on pasture after their release from confinement on March 19.

It is not yet possible to offer experimental proof that the type of restricted grazing described will prevent facial eczema. It is, however, a reasonable precaution and probably the best available to many farmers. The experiment described indicates that it is not attended by any serious effects on the health of sheep or the subsequent lambing of ewes.

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