A STUDY OF THE TIME OF PASTURING ALFALFA

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In previous studies of alfalfa used for pasture which the authors have made in Michigan, grazing was discontinued by September 1 to give the plants opportunity to store root reserves before winter. On the basis of other work at this station indicating that the clipping of alfalfa during September was particularly injurious, it was assumed that close grazing would likewise prove detrimental.

In 1936, a time-of-grazing experiment was started to gain additional information on the influence of fall grazing on the alfalfa and to determine the time in the spring when grazing could be started safely. The experiment was conducted on Bellefontaine sandy loam soil limed for the correction of acidity and seedings were made in 1935, at which time 250 pounds per acre of 0-8-24 fertilizer were applied. Hardigan alfalfa was seeded in oats and good stands were secured.

The grazing methods here reported were carried on in 1-acre paddocks, each time-of-grazing treatment being run in triplicate. The grazing practices followed were (a) pastured from April 30 to August 28; (b) pastured May 14 to August 28; and (c) pastured May 14 to October 16.

May, June, July, and early August were unusually dry, precipitation during this period being only 5.89 inches, about 50% of normal. From August 18 to October 16, 12.26 inches of rain fell at this station, about twice the normal. From July 7 to July 15, the maximum temperature each day exceeded 100°F, a record heat wave for this locality. In general, all paddocks were pastured off completely by August 28. New growth was stimulated by the late August and September rains. All alfalfa made an excellent recovery and that pastured throughout September and the first half of October furnished good grazing for eight spring lambs per acre, each of which made good gains during this period. The results are presented in Table 1.

It is not intended, at this early stage in the experiment, to draw definite conclusions concerning livestock returns from the different grazing treatments. This is particularly true in dealing with any comparison between grazing April 30 to August 28 and May 14 to August 28. For the present, these returns must be considered com-

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