

ROLES OF HAY AND SILAGE IN PASTURE MANAGEMENT

SEASONAL NOTES Contributed by the EXTENSION DIVISION

HAYMAKING and silage making, both necessary adjuncts to grassland farming on New Zealand dairy farms, unfortunately have adverse effects on even the best pastures, but good field husbandry can to some extent lessen these ill effects.

IN most dairying districts of the North Island the critical month for feed supplies is September. Winter-saved pasture has then been utilised, supplies of hay and silage are practically finished on most farms, and the rate of growth of the pastures is below requirements. This causes any available grass to be utilised as soon as it is long enough for the cows to graze, and the close grazing often retards the recovery of the pasture until well into the following month of October. If larger fodder conserves had been available, fields could* have been closed toward the end of September or early October, and when this is the case the first flush of grass, instead of being eaten, is soon long enough to harvest as silage. By retaining all the leaf growth, heavier and earlier crops are available with a higher nutritive and digestibility value.

When silage is cut early and in the leafy to early flower stage the growing season, although well advanced, is by no means over, and the recovery of these fields provides excellent succulent fodder when that on the balance of the farm is becoming less palatable; but to ensure early harvesting only those fields showing a predominance of ryegrass and white clover should be closed. Closing a field lacking in these two species generally results in a light, late crop from which overheated or burnt silage is often made.

The feed situation and the need to harvest the crop during fine weather usually preclude closing hay paddocks at the same time as those to be harvested for silage, but later closing does not detract from the value of the hay harvested, provided it is cut in the flower stage and not allowed to develop seed. If hay is cut after the seed has developed, the growing period of the plants is past, and during February and early March the paddock is dormant,



Only fields showing vigorous white clover should be closed for hay.



Hay and silage should be fed out on the fields from which they are harvested.

providing no feed whatever, while earlier cutting results in a dense aftermath that maintains production during the dormant period in late summer and can obviate the necessity of growing supplementary summer crops.

As the harvesting of fields for hay or silage, particularly for hay, tends to suppress the white clover, this plant should be particularly vigorous in those paddocks selected for harvesting, and to obviate its ultimate extinction harvesting fields should be rotated around the farm and cut only once in 3 or more years for hay; for silage they may be cut more often. The practice of cutting the same field year after year cannot be recommended, as this tends to strengthen the coarser grasses and eliminate both the clovers and the ryegrass.

The sward deterioration resulting from harvesting can be repaired to some extent by feeding out the harvested material on to the area from which it came and by topdressing as soon as the crop is removed to increase the aftermath, the eating of which in situ results in a considerable return of stock nitrogen to the field. For this reason the use of night paddocks near the cowshed is condemned, as it results in a transference of fertility from the harvested fields, while the practice of cutting hay for sale, usually late to obtain a heavy crop, also depletes the fertility and retards the growth of the aftermath, the grazing of which would recompense the paddock slightly.

To prevent sward deterioration and at the same time obtain reasonable crops of hay or silage the following recommendations should be observed:—

1. Close early.
2. Cut early, in leaf stage for silage and flower stage for hay.
3. Rotate harvesting fields; never harvest the same field year after year.
4. Feed out on the harvested area.
5. Topdress as soon as the crop is removed.
6. Graze harvested fields both day and night.
7. Select only those fields strong in white clover.
8. Don't make hay for sale.
9. Protect stacks adequately so that all harvested material is available for controlled utilisation.