Outstanding Importance of Utilization.

In New Zealand farming the concept involved in the statement is a momentous one, which already has been confirmed fully in New Zealand experience. It is momentous because it calls for the development in many of us, and maybe in the majority of us, of a changed outlook. This changed outlook would lead firstly to our not concentrating attention so completely upon what may be termed "direct" means of increasing the productivity of grassland—*e.g.*, top-dressing, the use of better strains of pasture species, &c., and secondly to our giving greater attention to the method of utilizing the growth of grassland with the dual objective not only of making most effective use of current growth but also of fostering future growth as fully as possible.

And this brings us back again to the fact that, if the reserves of feed for winter and early spring are inadequate, it is possible neither to make the best use of current growth throughout the year nor to foster the fullest future growth. Inadequate reserves of winter feed lead to overstocking or understocking as already indicated: overstocking at best means that too large a proportion of feed is used solely for maintenance; understocking means wastage.

There remains for consideration the effect upon the pastures themselves. The joint influence of overstocking and of understocking at the respective periods mentioned is weakening of a species which grows when the grazing is severe and strengthening of a species which grows when the grazing is lenient. In practice over wide areas the result is a weakening of the early developing rye-grass and strengthening of the late brown-top and sweet vernal. Unfortunately, examples are altogether too readily available.

Measures to improve Reserve-feed Position.

A most valuable and effective means of improving the feed position is conserving the surplus of summer feed in the form of silage or hay. In some cases, however, there has been a tendency to place too much dependence upon the reserves of feed that actually are built up in the form of silage. To this matter there are three distinct aspects that require consideration. In the first place, because of weather vagaries from year to year, there is no certainty whatever that in next summer there will be enough surplus grass-growth to give reasonably safe supplies of silage. In the second place, on account of various factors, human and otherwise, assuming an adequate surplus of grass-growth for the purpose under consideration, experience teaches us to expect a marked disparity between the potential reserves of silage and the actual reserves. It may be contended that the disparity is due to faulty management, but for practical purposes the crux of the position lies in the fact that such a disparity is customary and so must be allowed for in any planning that professes to cover the position as it is as distinct from the position as it might be or as it should be. In the third place, ensilage as commonly carried out gives feed that fails in respect to the quality required for certain important purposes in dairying—*e.g.*, the feeding of cows in late summer and the feeding of pigs with farm-grown material when the supply of dairy by-products is inadequate. Because of these and other facts most farms, including those on which ensilage and hay making are given a prominent place, could profitably undertake some special cropping for the purpose of creating reserves of feed.

Judicious top-dressing, which was discussed at some length in these notes last month, is considered briefly below in part of its relation to seasonal supplies of feed.