subject to hard seasonal conditions. Of the perennial strains of white clover, Kentish wild white appears to offer the best form for perennial low-fertility habitats, the New Zealand type 2 the more suitable for the next grade of soil, and the New Zealand type 1 for the most fertile soils or those that can be rendered so by top-dressing, &c.

This classification of clover types enables one to visualize readily the place subterranean clover may take in grassland ecology. The burr-clovers may be ruled out as being unsuitable for pasture work on account of their low palatability and burr-like seed-pods that are a menace to the wool crop. Thus subterranean clover occupies a place in grassland ecology intermediate between suckling clover and perennial strains of white clover, merging well with the suckling clover habitats and covering as well the habitat range of the annual and short-lived strain of white clover. A plant in such a position is of great value in any programme of pasture improvement where the initial soil conditions are such that good strains of white clover may not be readily established. Subterranean clover, then, is a pioneer acting in the capacity of a stepping-stone between the less valuable annual clovers and white clover. The above arrangement of clovers is a reliable index of the available soil fertility, particularly in regard to available supplies of phosphate, potash, and lime, and just as each represents a fertility standard so each represents a fertility demand. Thus subterranean clover has a soil-fertility demand between suckling and white clover.

The rise of a species to dominance in grassland is a reflex of its ability to produce under the conditions offering. Thus, in a rising scale of fertility upbuilding, subterranean clover replaces suckling clover and white clover replaces subterranean clover, provided always in the latter case that droughts do not hinder and retard the development of the perennial white clover.

The ability of subterranean clover to produce more fodder than suckling clover is the keynote to the successful use of phosphatic top-dressing on country that prior to the introduction of subterranean clover scarcely returns sufficient growth to warrant the expense of top-dressing. Haresfoot trefoil, striated clover, clustered clover, and suckling clover all respond to phosphatic top-dressing, but the results from top-dressing these plants have not encouraged the widespread use of phosphate on them. The introduction of subterranean clover on to country carrying swards where the lesser annual clover dominated previously has meant an extended range of country that can be profitably top-dressed, and this fact has led to an enormous increase in the amount of subterranean-clover seed sown during the last two or three years. It must be realized that the value of subterranean clover is largely wrapped up in the knowledge that the country pays to top-dress when subterranean clover is present, and does not pay to top-dress when subterranean clover is absent.

This point alone is of great significance, because the moment phosphate may be economically applied any grassland farmer has the making of his country in his own hands. Phosphate is the driving force to grassland progress, and the more efficiently this