

## Letter to the Editor

The Editor,  
Irish Forestry.

Dear Sir,

The article by Savill and Dickson<sup>2</sup> in the last issue of Irish Forestry (Vol. 32, No. 1, 1975) raises a number of interesting points some of which we feel may be misinterpreted by your readers.

It is noted with much interest that the authors have been successful in relating site vegetation to fertilizer needs on both deep peat and gley soils. That they have been able to do so is encouraging to say the least particularly as vegetation type is a site parameter easily read by the discerning forester on the ground.

Notwithstanding these findings our first concern would be that one must bear in mind the severe limitations imposed by the use of vegetation analysis alone to evaluate sites. Its main limitations are (i) that roots of ground vegetation do not normally permeate the soil to as great a depth as tree roots so it does not reflect conditions in the deeper regions of the soil profile and (ii) that changes in ground vegetation may be a reflection not of site but rather of the influence of man or of animals.

Our second concern arises as a result of their comments in relation to the use of other site parameters, specifically soil, for predicting growth potential and fertilizer requirements. Although it is stated that "tree growth is obviously being influenced by soil conditions" it is strongly suggested that soil parameters are not useful for this purpose. The background for this philosophy appears to be a paper by Adams *et al*<sup>1</sup> who failed to find a relationship between tree growth and soil type. This is not surprising when one considers that the analytical methods used by the latter were designed specifically for agricultural crops and bear no relationship to forest trees.

Too many reports are to be found in the literature where scientists have failed to relate tree growth and/or fertilizer requirements to soil characteristics in which agricultural methods of soil analysis were used. Once again it must be stated that there is no reason whatsoever why a particular analytical method should work for Sitka spruce or lodgepole pine simply because it happens to

1. Adams, S. N., Jack, W. H., and Dickson, D. A., 1970. The growth of Sitka spruce on poorly drained soils in Northern Ireland. *Forestry* 43, 125-33.
2. Savill, P. S., and Dickson, D. A., 1975. Early growth of Sitka spruce on gleyed soils in Northern Ireland. *Irish Forestry* 32 (1).

be useful for potatoes or sugar cane. Foresters must strive to develop their own analytical procedures which are of relevance to tree growth and fertilizer response instead of reverting to an era when sites were evaluated solely by vegetation type, a system long recognised to be unsatisfactory. In this way statements like: "The present classification of gleyed soils is therefore of limited use to forest management . . .", page 35, are likely to become less common.

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