

Letter to the Editor

The Editor,
Irish Forestry,

Dear Sir,

While recognising the plea from Messrs Carey and McCarthy (letter to Editor, last issue) that "foresters must strive and develop their own analytical procedures which are of relevance to tree growth" and indeed accepting this as a valid long term goal of the soil physicist and chemist we wonder how many Scandinavian or North American foresters would agree with their statement that classification of forest soils on the basis of vegetation is "a system long since recognised as being unsatisfactory". Unsatisfactory to whom, the forest manager or the soil scientist?

If we all possessed the undoubted abilities of Carey and McCarthy and if we all had access to a fully equipped soils analytical laboratory (preferably one which could easily be carried in the pocket or knapsack) we could relate tree growth directly to the complex of soil physical and chemical conditions which influence it. Until then we must use some easily recognised site characteristic as an index of these soil factors. We would again submit that vegetation can be used as such an index.

In the poorly drained peats and gleys on which we have suggested that vegetation provides an index to the growth and fertiliser requirements of Sitka spruce it is very questionable if the tree roots *do* penetrate deeper than the roots of the native vegetation.

We agree that very little of the vegetation in Ireland is unaffected by man's activities. We would, however, suggest that where these activities have altered site conditions sufficiently to produce radical changes in the vegetation then these same changes will also affect tree growth, at least over a large part of the first rotation.

Might we also point out that we did not and still do not suggest that all systems of soil classification are unsatisfactory. To do so would be nonsense. We stated simply that the present system used in Northern Ireland (which is at the level of Great Soils Groups) is and will always be unsatisfactory for forest management. The reason for this is of course simply that the units of classification include too wide a range of variation in the soil factors which influence tree growth. Within a single unit (e.g. surface water gley) the growth of Sitka spruce can range from Yield Class 10 to Yield Class 24.

Only by subdividing the present classification units into sub-units which are related to tree growth can the situation be improved. We suggest that this sub-division should be based on variation in natural vegetation, but we realise that it is not the only way. Our suggested method may lack the scientific sophistication of the approach advocated by Carey and McCarthy but it has two advantages—it is simple and it works.

Yours faithfully

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