

I tried to choose models which were widely used and of general availability, both in published form and on computers.

The reference to the model of Elliott and Goulding (1976) was not intended as a laudatory statement any more than the omission of the model of Clutter and Allison (1974) was intended to be derogatory. I agree that the model of Clutter and Allison has proved flexible and reliable for New Zealand Forest Products Ltd., but the model is site invariant and probably unsuitable elsewhere. I believe that the Elliott and Goulding model has had a greater effect on radiata pine growth modelling than Clutter and Allison's model, which I understand to be without imitators in New Zealand.

Incidentally, I disagree with Mr Woollon's description of Clutter and Allison's model, which cannot be described as a stand level model as diameter distribution information is intrinsic to the prediction of growth. My use of the term "diameter distribution" refers to models such as that of Clutter and Allison which can be seen to fall into more than one of the categories of Munro (1974).

R. B. TENNENT

Soil Factor and Tree Stability

Sir

I would like to make a few comments on a recent article on the influence of the soil factor on tree stability by D. M. Boyd and T. H. Webb, (Vol. 26, No. 1, pp. 96-102).

I felt the paper dealt too superficially with a number of points and in others, may prove misleading. For instance:

Page 98. "Non-soil Factors Influencing Tree Stability"

"... climate does not change appreciably over such a small area ...".

This ignores the effects of the adjacent hill system which causes very different wind characteristics and consequent damage patterns in the western end of Balmoral Forest.

"... younger trees are more wind-firm". This is not necessarily true.

Page 100: Broken trees are excluded from the analysis. What happens to results if they are included?

"Within about a 5 m radius". I find this a little unscientific.

"Results and Discussions"

Transects A, B and C show percentage damage that changes from a high damage zone across a standing zone and back into a high damage zone. An examination of the aerial photographs of the 1975 storm will reveal that the two high damage zones result from two distinct wind patterns. The damage zone to the north resulted from a "dumping" down of wind off the adjacent hill. Wind damage nearer the Hurunui River was a consequence of winds funnelling down the Hurunui Gorge. The standing zone, which coincided with shallow soils, may have been in a sheltered buffer zone between these two wind systems. Damage patterns might not be a consequence of soil characteristics as the article would suggest.

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