

## Reply to a critical son

Sir

It is not unknown for fathers to be subjected to indignities by their sons (think what happened to poor old Noah!). But I have to register concern when they are encouraged to do so within the pages of a professional journal (such as I had hitherto supposed New Zealand Forestry to be). Moreover, when your correspondent M.D. Richardson clouds the issues by introducing red herrings (New Zealand never had any corn-laws and slavery is a sensitive issue here) I have to conclude that, while the boy doubtless means well, he is unable to distinguish satisfactorily between economic and ethical options with respect to sustainability. In case the disability is inherited, let me share with him a note which is both lighthearted and profound from the Director of "Resources for the Future", Robert Fri, in which he posed three questions: Is sustainable development more likely to thrive under some particular set of political and economic institutions than under others? Should the values that underpin this development become part of mainstream ethical systems? And, if the answer to these questions is 'yes', are we prepared to live with the results? He concludes that the political, economic, and ethical settings in which sustainability is pursued will determine success or otherwise. In reading these questions and Fri's answers, I was reminded of the words of one of my own mentors - Lady Jackson (Barbara Ward) who commended "that combination of modern science with local inventiveness and local responsibility that is at the core of the only effective and sustainable ecological balance".

S.D. (Dennis) Richardson

## **Forest valuation**

Sir,

I agree completely with E.M. Bilek as to what Faustman shows; however I doubt that this was ever used when decisions were made to invest large sums of money in forests in the 1920s and it certainly was not considered when large sums of private money was invested in the 1970s. Perhaps it was used by Roger Douglas and his economists when they decided that the State Forests should be sold off as rapidly

as possible.

My main concern is with the dirt forester who has to account for his stewardship. Forest models can provide good figures for the standing volume in a forest and they can be used to predict with a fair degree of certainty the growth in volume and the change in quantity that will occur in future years. However, in accounting on an annual basis, reductions in value of the standing forest caused by possible losses from wind throw, fire and other reductions such as thinning have to be shown.

On the question of money values, the figure must be unique to that particular forest, taking into account the cost of logging and transport to the selling point, whether it be a mill or port. This will vary from year to year as costs and prices vary. Using this figure to predict future values is only of use to show how forest growth improves values with age. Something of which owners should be kept aware. Forecasting market trends has no place in this. The forest manager's job is to produce the best result, volume and quality wise, and this monetary figure should only be used to quantify the expected improvements over time and to produce a figure that has meaning to non-foresters.

Foresters can in this way provide reliable figures year by year of the value of their forests. Accountants have yet to come to grips as to how to show this value in their accounts.

J.E. Henry

## Not true to type (soil type)

Sir

At risk of being labelled a pernickety soil scientist, I feel I must draw your readers' attention to a rather too free use of the term 'soil type' in your last issue. Dr Tat Smith was careful to define most terms in the body of his article (Is Plantation Forestry Good or Bad for Soils?), but Figure 5 has somehow slipped through whatever checking was carried out. At only one of the six sites on this figure was soil type applied correctly; BURNHAM (Lismore silt over gravel). The others were an amazing mixture of geology, topography and/or detailed soil classification.

An abbreviated definition for soil type is that it is a basic unit of soil mapping and should be designated by the geographic name of its series coupled to a textural name which indicates the texture of the topsoil.

Soil scientists, particularly those work-

ing in forestry, are few and far between these days, and are under much pressure to keep accountants happy. However, it is now more important than ever to keep standards high. The application of forestry trial data from very specific sites to broader areas is potentially more reliable if the soils are correctly identified at the outset of the trial. So how about some consistency in our soil typing for the future?

Geoff Mew

## Tat Smith replies

Sir.

My thanks to Geoff Mew for pointing out the misuse of the term "soil type" in the manuscript that was published in New Zealand Forestry. I was unaware of the way in which this term is used by New Zealand soil scientists. Being educated under a different soils system led me to use the term too loosely for a New Zealand publication; and I am glad to be educated in its proper technical usage. Sometimes it is difficult to learn the new system fully without taking the proper undergraduate course!

However pleased I am to stand corrected, I also have to admit to feeling a bit blind-sided by your letter, as there was an opportunity for you to correct the misuse prior to publication. Please do not hesitate to correct me as soon as possible the next time!

You raise some good points about the small number of soil scientists working in forestry these days; and I agree that we must keep standards high. Correct use of technical terms is basic to maintaining high standards. However, I question whether I should have used "soil types" in the manuscript, even if correctly applied. My experience with foresters in the US indicates that names like "Taupo sandy loam" may not be as useful as a term that incorporates some combination of information about parent material, texture, fertility and moisture status, management limitations, and perhaps weathering status.

In the US system, soil series names convey very little, and require more education in soil taxonomy than most non-soil scientist foresters get exposure to in their undergraduate forestry programmes. As a result, and to provide a useful aggregation of soil series on the basis of properties important for forest management, the New Hampshire state soil scientists (Sidney Pilgrim and others) developed a system parallel to the SCS classification, referred to as Important Forest Soil Types. These grouped soils according to texture, fertility and moisture-holding capacity,