and to politicians especially, the main task of foresters seems to be regarded as little more than planting exotic (preferably radiata) trees and, after an appropriate lapse of time, felling them again before repeating the cropping cycle. Any suggestion of a broader philosophy involving an extensive as well as an intensive application of forestry principles is dismissed as either an economic nonsense or an assault on the natural environment.

Is it any wonder then that the demise after 70 years of the State as forest owner/manager has led to a crisis of confidence in their profession with many foresters? At one extreme, the establishment of the commercial corporations and the sell-off of as many of the nation's production forests as buvers could be persuaded to bid for acceptably and, at the other extreme, the setting up of the Department of Conservation, have in great measure removed for those who saw it as their career goal the opportunity to practise the ideals of multi-purpose management.

Yet had there been no State as forest manager, who would have established the extensive plantations to stabilise the sand dunes on the west coast of the North Island and thus protect the valuable farm behind, who would have started to plant forests on the eroding hill county of the east coast of the North Island, who would have waged the fight against deer destruction in our mountain forests before the advent of helicopter hunting, and who alone (because of the long time scale involved) could even now, if only there were the will, pursue a policy of indigenous afforestation and management.

In the space of 70 years the enormous indigenous forest resource for which MacIntosh Ellis had such high hopes and about one sector of which Leonard Cockayne in 1926 wrote: "I can assert with all confidence that in her beech forests New Zealand possesses a perpetual source of great wealth, but only so long as they are properly conserved and managed", has been squandered. Conversion to exotic plantations could have been carried out then alongside the beginnings of an indigenous forest management policy, and the bitter rangles of the past 20 years with environmentalists over the fate of the now residual forests perhaps could have thus been avoided. Graphically, Ken Shirley has provided the appropriate epitaph: "The past conflicts between natural indigenous and commercial forestry are now largely resolved in this country" (NZ Forestry, February 1991).

"Comment", in the same issue of the journal, takes up the theme. "Both preservationist (i.e. accountant) lead to the same conclusion

that wood production must be confined to plantations single-mindely devoted to that purpose alone. Accidental as the alliance is, the combined effect is forcing the profession out of the forests and away from the practice of forestry as many in the profession see it." "Comment" then suggests, "but what is wrong with that?'

If, following the short-sighted abandonment of State forestry in New Zealand, this is all that is left one can only feel disillusioned and cheated. Much forest land has a potential quite different from that of farmland and is well suited to a multitude of purposes. Many foresters will be hard to convince that the only alternatives are preservation or single-species log farming.

Eric Bennett, Rothesay, Isle of Bute, Scotland

## Is it silly to make new planting mandatory?

Sir,

Mr Ken Shirley considers, in the context of the sale of State wood resources. "mandatory replanting clauses for plantation forestry to be a superficial nonsense. Forest owners and managers will willingly replant provided the long-term outlook is reasonable, because that is their business." (NZ Forestry 35(4):6).

Perhaps so, but we could be sure about that only in a perfect, fair, stable economic world, which certainly does not exist. New owners and managers could have been linked to, and subordinate to, large international organisations with interests in more than one country. The ultimate concerns of these could have been the net optimal results of international operations, not just the sustainability of wood supplies from some New Zealand forests. If it had suited them to concentrate investment in places other than New Zealand at a particular time, replanting could well have stopped here. The result of that would have been a legacy of weed-infested land of reduced value, our land.

That many of the cutting rights have gone to New Zealand companies with good replanting records is a matter of relief for many New Zealand foresters. But the only way the public, the owners, can be sure that all replanting will be carried out for the whole of the rights periods is to have mandatory replanting clauses in the agreements.

Mr Shirley sees the market as inducing the best production decisions. One basic problem with the market is that, inevitably, it has a short time-frame, well short of forest rotations. All sorts of commercial pressures could interfere with the replacement of stands as they are cut. Centuries of forestry history in many countries have shown that reliance solely on the market does not ensure sustained supplies of wood.

But perhaps one question which should be asked about the New Zealand commercial forestry market is: Will there be enough players in it to ensure that it works properly? Several New Zealand forestry companies have disappeared during the last decade and so now New Zealand commercial forestry is dominated by a small number of large ones. Will this trend of diminution continue over the next ten years? Will farm forestry develop sufficiently to compensate for it? Perhaps New Zealand is too small to have a commercial forestry market that works freely?

It may well be that, in a few cases, replanting is not the best use of the land. The odd small and isolated forest may be better suited to agricultural purposes. But in such cases the replanting requirement could have been changed to a requirement that the land be left in a condition suitable for agriculture. In other words, let the market operate but add a few wise rules.

'Superficial nonsense" or prudent protection of the productive capability of public land? I incline towards the latter view.

Peter McKelvev

## ERROR IN 1986 FORESTRY HANDBOOK

Chris Goulding of Forest Technology Division, FRI, has drawn our attention to an error in the 1986 Forestry Handbook (NZ Institute of Forestry). He writes as follows:

'I have just discovered an error on page 77, in the section on Measuring Logs. Luckily it is not by me (my errors are yet to be discovered). In the formula for calculating the volume of a log, given large and small end diameters and length, commonly called the 3-dimensional formula (Ellis, 1982), the third coefficient is erroneously given as 0.004 711. The correct value is 0.884 711. This clearly a typographical error. However, several people have used the version in the handbook, and we have had queries about the results, so perhaps a note in NZ Forestry may be appropriate."