

LETTERS TO THE EDITOR

TERRACE RIMU FOREST

Sir

I wish to draw your attention to a paper published in the New Zealand Journal of Forestry Science Vol. 15(1) pp. 3-22. This is:

Six Dijkstra, H. G.; Mead, D. J.; James, I. L. "Forest architecture in terrace rimu forest of Saltwater Forest, South Westland, and its implications for management".

This paper, on p. 20, contains the following passage:

"Later Chavasse studied the regeneration pattern (at Ianthe State Forest), and concluded that, while this stand was even-sized, it was not even-aged (Chavasse 1964). Later still Chavasse & Travers (1966), using the same plots as Foweraker & Hutchinson, concluded that the stand structure was uneven-aged, that regeneration was insufficient for even-aged management, and that selection management was therefore the best option. Furthermore, they suggested that the system should be based on single trees or individual groups, although they also recognised that different parts of the forest might require somewhat different treatments."

The paper I published in 1964 ("Guide to the Forest Types of Westland") was an amplification of NZFS Information Series No. 43 ("Forests, Soils and Landforms of Westland"). Neither paper has anything to do with "the regeneration pattern" as stated by Six Dijkstra *et al.*, nor is it confined to "Ianthe State Forest". There is also no implication, in either paper, that the "stand" is either "even-sized" or "even-aged". Indeed, neither term is mentioned in relation to the terrace forests as such. In Appendix 2 of Information Series No. 43 the terrace forests are briefly described as follows: "Dense mosaic podocarp forest, sometimes in even-aged groups, or in all-aged stands. . . ."

In "Guide to the Forest Types of Westland" (1964), the terrace forest types are described in more detail, based on National Forest Survey (NFS) data, on pp. 4 and 5. The major type in terms of areas (P1) is described as follows: "Dense mosaic podocarp production forest of the terraces, sometimes in even-aged groups, or all-aged stands, some groups approaching" [other NFS types] . . . "The type contains a significant amount of rimu advance growth." The other NFS types on terrace land are also described.

Let me now refer to the paper by Chavasse and Travers 1966 ("Growth habits of rimu in Westland's terrace forests and their implications for forest management"). This paper discussed the update studies of the Foweraker and Hutchinson (1930s) plots and their implications for even-aged management. It is stated that these plots "appear to show a marked trend from relatively even-aged in the younger phases to markedly uneven-aged stands in the older phases". In the conclusion to this section it

is stated: "Although even-aged management is feasible, the natural stand structure of the terrace podocarp forests is an uneven-aged one of varying degrees and it is most desirable, for many reasons, that they should be intensively managed as uneven-aged forest".

Part III of this paper discusses uneven-aged management; inter alia, it includes the statement: ". . . the P1 mosaic, each part of which will require individual treatment". The system envisaged logging trees above 32 inches dbh in the mature groups, and thinning immature groups to induce increased diameter growth. As with any selection system (*not* selection logging) one of the principal objectives of logging was to secure regeneration.

The "many reasons" for adopting selection management (referred to above) are in fact given in a paper which Six Dijkstra *et al.* do not cite. This is Chavasse 1954 ("Potentialities for indigenous and exotic forestry in Westland", New Zealand Journal of Forestry Vol. 7(1) pp. 34-49). This paper also draws attention to the mosaic structure of the terrace forests and contains information on regeneration periods of 100 years or more, which the author considered to indicate uneven-agedness (although Six Dijkstra *et al.* have a different interpretation). This paper points out that rimu is sensitive to exposure and that clearfelling induces soil water-logging, both considered to indicate that selection management would be preferable to even-aged management. The paper stressed that soil management on these sites was at least as important as stand management. (Six Dijkstra *et al.* seem unconcerned on this score.)

While Six Dijkstra *et al.* have consulted unpublished papers by Foweraker and Hutchinson, they have not done me the courtesy of even glancing at a most important unpublished paper which was indeed the basis of the early selection-management trials I initiated. It is entitled "Selection - Terrace Rimu Forests", dated 13 April 1956, and held on the files of the N.Z. Forest Service in the Hokitika Office. This paper would make it abundantly clear that I never entertained the idea that the terrace podocarp forests were either even-aged or even-sized. I might also point out that the prescriptions in this document bear no relationship whatsoever to the subsequent selection logging practices on these sites.

It will be clear from the above that Six Dijkstra *et al.* have completely misrepresented the work I undertook, and the papers I produced, on management and silviculture of terrace podocarp forests in Westland.

I should therefore be obliged if you would publish this letter in rebuttal.

C. G. R. Chavasse
Forestry Consultant
57 McDowell Street
Rotorua
NEW ZEALAND