

Silviculture judgements

It is not possible to become an instant expert silviculturist. This takes considerable study followed by practical experience. Yet recently we have seen many new 'experts' appear, particularly in general public discussions on forestry issues. The debate on sustained yield management in the beech forests last month must have made many foresters cringe. Words like selection forestry, selection logging (an anathema in the practice of good forestry), clearfelling and sustained yield were thrown about in a way which illustrated many of the speakers' ignorance of basic silvicultural principles. It will probably amaze foresters that in an answer to a question in Parliament on April 10, the Prime Minister and Minister for the Environment, the Rt Hon Geoffrey Palmer, said that "an interdepartmental officials group are presently preparing a paper recommending a definition and general prescriptions for sustained yield management". It is to be hoped that "sustained yield" doesn't go the way of the word "conservation" which the politicians were able to emasculate.

Silviculture is central to the correct management of forests. For through silviculture, the forester must try to weld the overall management objectives of the owner into a practical strategy which is biologically sound, and he must do this with an eye on the cash book and ever-changing social requirements. A good silviculturist must be an ecologist with a detailed knowledge of autecology, synecology and plant ecophysiology; have a

good grasp of forest economics, harvesting, processing, social sciences, forest administration and forest management techniques and also these days be able to run sophisticated computer models. On top of this he must be a sensitive, observant person attuned to nature and people, be practically minded, show good common sense and have a vision for the future. Such a person is not easy to find.

Invariably, poor silviculture is a result of not correctly weighing up all aspects that go into a decision. A now classic New Zealand example was in the attempts to manage South Westland rimu forests using the wrong harvesting techniques. The disastrous results are well known and with them a loss of credibility of forest managers. Other examples can be found in the management of our natural forests or the plantations. Recently I observed that staff in the Department of Conservation were unaware of well-proven establishment techniques (see photo). Similarly there are still some managers who blindly use large machines to clear sites when it is readily apparent the technique can lead to major site degradation. Trying to save costs can also backfire. Thus I would seriously question those people who suggest that we should be re-establishing the plantations using natural regeneration. And I personally am against the current Forestry Corporation practice of pruning to under 5.8 m as this overlooks the immense strategic advantages of clearwood. On the subject of computer



Planted native *Coprosma* struggling against severe competition – an example of poor establishment techniques. (Photo: D.J. Mead)

models, foresters can easily be trapped into relying on these to too great an extent; they can only assist in the decision making and don't relieve the manager of the responsibility for weighing up other factors. Current models do not have a good ecological or physiological basis and have many other limitations; the manager must include these aspects in his weighing up of the decision to take.

For the forestry profession there are two main conclusions. First, as foresters we must always take great care in our silvicultural decision making and make sure we have not overlooked or overstressed some factor. We should frequently leave our offices and observe what is before our eyes. As professionals, we deserve to be judged on the quality of our forests.

Secondly, we need, as a profession, to be educating the public in the basic principles of forest ecology and silviculture. This is required not only to gain the public's support but to help obtain informed debate. This needs to begin at the primary school level. It is a challenge for us all.

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Editor

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