

Small scale forest harvesting is not easy

Sir

On 6 December last year, the North and Central Canterbury branches of Farm Forestry hosted a field-day at Mt Barker forest at the eastern end of Lake Coleridge in inland Canterbury. Mt Barker forest (380 ha) is situated on University of Canterbury land, and is managed under a Joint Venture agreement with Nick Ledgard and Gordon Baker. The forest consists almost 100% of wilding Corsican pine, and is managed for wilding control objectives and for sustainable production.

The most useful discussions during the day were on small-scale harvesting. Udo Benecke compared the range of systems seen throughout the world, from single-tree selections resulting in a continuous cover of forest, through to small coupes of 1 ha or less. Much sympathy was expressed for these low-impact harvesting regimes. But, as pointed out by many, the reality in New Zealand is that, although the prescription is easy to write, the practice is virtually impossible to implement cost-effectively. The main reasons are that we do not have the harvesting crews with the appropriate skills or equipment to practice small coupe forestry, and that the volumes for harvest are often too small for scale-efficient operations.

The objective at Mt Barker is to attain a steady-state, sustainable harvest of 2-3 ha annually. These will be felled in the form of small 'harvest clearings' of around 1 ha in size. The result will be a mosaic of age classes (and different species), which will encourage a visual landscape more pleasing than a blanket clearfell, and a healthy richness of plant and animal species (biodiversity). During the field-day, we inspected the harvest clearings, and even at midday, the level of background calls from native birds (mainly bellbirds) and exotic passerines (mainly finches) was impressive. Tits, fantails, grey warblers and brown creepers are also often seen.

Mt Barker forest before harvesting began on the SE slopes. Lake Coleridge in the background.



Mt Barker from a distance. showing small harvest clearings.



At Mt Barker, harvest yields of mature Corsican pine will be all wildings for many years to come, and only yield around 3-400 m³/ha. When a steady-state is reached, this will equate to a maximum of 9-1200 m³ available for annual harvest, and we were told that at least 1500 (preferably 2000) m³ are needed to justify bringing in a harvest crew and equipment, and undertaking a cost-effective operation. The Mt Barker solution to this will probably be to harvest their 'annually available' 2-3 ha, only once every three years. This will make available an acceptable volume of timber, and should not affect the forest's age-class structure and appearance too drastically.

But the main point of this letter is to comment on the remark made when the harvest volume problem was mentioned. "Hang on" said someone "Johnny Wardle at Cooper's Creek does not need that much". Very true, but Johnny's situation is unique. He has a high value timber (black beech) which is being harvested and processed with his own customised equipment by a family living on site. And, more importantly, their blend of work ethic, marketing skills, and particularly knowledge of how to manage their forest silviculturally, would be hard to equal in New Zealand. Let's not kid ourselves that this mix can be readily replicated elsewhere. This needs to be understood more widely.

I guess the thrust of the above is that I am taking issue with Grant Rosoman's concluding comment in his letter of reply to John Purey-Cust in the August 2003 volume of this Journal. To quote Grant "I am a tree grower myself, and have been a supporter of John Wardle's restoration forestry for 10 years. What intrigues me is, with the widespread acclamation of John Wardle, why are there virtually no others following suit?" My response to that would be "If John and Rosalie and their offspring were to be offered retirement in Hawaii, is there one reader of this Journal who could readily carry on where they left off?" I doubt it - even more than I doubt whether Johnny would accept the Hawaiian offer.

Nick Ledgard