Silviculture – Early Equals Easy

Keywords: Silviculture, farm forestry, plantations, *Eucalyptus globulus*, pruning, agro-forestry, sawlogs.

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This article first appeared in the Summer 2003 issue of “Agroforestry News”.

“the drying product looks great”

Just 13 years after establishing our first agroforestry plantings on “Tantaraboo”, the Hirst family are pretty happy with how things are proceeding. It seems we’re now heading down the home straight in about half the time that I had expected.

This realisation has come about through the experimental sawing, in April, of eight of our *E. globulus* at Creswick. While final processing is still proceeding the initial green recovery showed more than double the select grade that is expected in one of the industry staples; regrowth Mountain Ash. Products are still a little way off but the drying product still looks great. These results confirm experience in Western Australia, New Zealand and elsewhere: if you want quality Eucalypt sawlogs then prune on time and ensure the trees always have plenty of room to grow.

“final crop spacing was the way to go”

Not that it took much to convince me that final crop spacing was the way to go. Ever since I saw it in NZ in 1990 it always seemed logical. The principle is simple: decide how many final crop trees you want (and thus their average spacing [x m]) and how many you want to pick each crop tree from [y], then simply establish groups of y trees at (roughly) x spacing.

“get your silviculture done early”

Apart from the fact that this keeps most of your paddock accessible for vehicles (so long as you don’t need to mound) it has the tremendous advantage, in my experience, of forcing you to get your silviculture done early; you can’t leave five trees a metre apart for ten years! The decision is easy. Just pick the best tree in each group and cull the rest. With evenly spaced trees it’s too easy to postpone thinning then agonise for too long over which trees and how many to remove. In the meantime the stand suffers and its chance of growing valuable sawlogs diminishes. Of course the decision to use this system was made easier for us as we knew from the start there was no chance of making any money from pulp.

“watch the trees grow into money”

Although the work was pretty intense early on, it was low-tech, requiring little training or machinery.
Another important factor is that enthusiasm levels are always higher near the start of a venture, so get into it early! The great thing now is that we can sit back and enjoy the park-like atmosphere of our agroforestry paddocks, knowing that there’s now bugger-all to do before the final harvest except watch the trees grow into money!

The early silviculture means the slash has now long since gone and the area is still a paddock where you can easily find the weeds and stock, rather than a “messy” forest. We are also recreating some native forest which has its own joys, but the weeds are much harder to control.

Pasture production under the trees has started to diminish rapidly lately so stock spend less time now in the agroforestry paddocks per rotation. But who cares about the pasture when you can watch your trees putting on 13 m$^3$ of clearwood per hectare per year (based on a 7 m pruned log in each of 100 trees growing at 3 cm diameter per year) and it’s worth about $100 per m$^3$ in the paddock! The other thing which makes losing the pasture easy to take is that our rotation now looks like being less than 20 years rather than more than 30 as we’d expected initially.

“less pruning, fatter trees and more grass”

If (probably “when” would be more accurate) we establish more commercial trees the recipe won’t be much different. Depending on the conditions, three will probably be the selection number – having to cut down three or four perfectly good young trees per group can be a bit tough. I’ve yet to be convinced that a higher stocking (say 140 stems per hectare) would be desirable: I rather like the combination of less pruning, fatter trees and more grass. The decision will depend largely on whether we can market 70 cm (diameter at breast height) logs or smaller ones are required. On-going research by the CRC for Wood Innovations and the CSIRO will help us decide on the best stocking.

In the meantime we’re not having much trouble enjoying watching our trees get fat, and we hope you can enjoy yours as much.

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