There was the extensive nursery itself and all its operations. There was a surrounding arboretum of introduced forest trees, the adjacent Whaka plantation in which some of the stands were already more than 20 years old, and Kaingaroa land and the land of many forestry companies was being planted at a rapid rate.

At the end of the year I won a Smith/Wylickie Forestry Scholarship to attend the recently established Forestry School in Auckland. During the four-year course one had to complete 12 months of practical work - which meant working during vacations - and write an account of it in diary form. I therefore wrote up my year in the Whaka nursery. I still have it, so will present this to the old stables.

It is revealing to look back on that year in the Whaka nursery and study the main developments that have taken place since. Two stand out above all others. Horsepower has been replaced with other modes of power, thus saving a great deal of money and facilitating the introduction of new techniques of dealing with nursery stock. Of equal, or possibly of greater importance, has been the development of chemical weedicides.

Modern methods of developing and multiplying planting stock have come about through recent research, some of it genetical. These will lead to many wider developments.

One needs to bear in mind the unique history of development of the pumice lands and that the pendulum has swung from plantation forestry to agriculture. It will continue to swing in the future. But the potential for the development of plantation forestry in the remainder of New Zealand is considerable.

Age to harvest your woodlot

Sir,

There has been an ongoing argument within the forestry press regarding the correct age to harvest a forest. What is right economically is not necessarily right scientifically. I have found this discussion extremely interesting. I have a degree in economics and a forestry science degree; I am therefore neither one side nor the other.

The problem in choosing an age to harvest relates to two things. The market sets one standard based on diameter size, branch size and sweep; while the wood scientists insist density is all important. Considering the market does not recognise density (yet), many companies and woodlot owners harvest their trees as early as possible.

Is it fair to blame the forest grower for putting “inferior” wood onto the market? The forest grower has planted and tended the forest for one reason. The grower wants to make as high a return as possible. The forest grower tries to produce what their market asks for in as short a period as possible. This decision maximises the forest grower’s Internal Rate of Return (IRR) and the growers’ Net Present Value (NPV). It makes perfect sense that the grower should aim to do this.

However, there is no argument that low-density wood is inferior and can conceivably cause the forest industry great harm if used under the wrong conditions. Nevertheless, if low-density wood is used in the wrong place, then surely the fault for this must lie with the market and not the grower.

To date density has not been a problem, due to the traditional end products of Pinus radiata. Density is virtually irrelevant if the end product is car package cases, pallets or other low-quality products. If this is to be the end use, then as long as the spec’s measure up, the forest should be harvested. The problem exists today because Pinus radiata is being used in areas where strength is important. The market is willing to market Pinus radiata for this use (and get a premium for the higher-quality product); however the market is unwilling to notice the difference when it comes to buying logs from the grower.

To be fair to its customers, the market needs to recognise the end use of Pinus radiata. If it is to be used in areas where strength is required then density is important. When buying logs from the grower the market needs to pay a premium for high-density wood. The premium should be such that when a grower examines their IRR or NPV these figures show it is worth harvesting at a later date to receive the premium for high-density logs. Otherwise why would, or should, a grower wish to leave their trees in the ground?

I would appreciate further comments or discussion on this argument. If you wish, you can reply to me through the pages of this journal, or contact me directly at P.O. Box 5260, Wellington.

James Treadwell

Environmental effects of planted forests


Compiled and written by Piers Maclarea, a scientist at the New Zealand Forest Research Institute, this ‘bulletin’ (it is more like a well-illustrated book) was commissioned by the Forest and Farm Plantation Management Cooperative. We are told that this Cooperative is an organisation comprising 57 members of the forest sector and that their main objective is to promote both corporate and farm forestry by means of scientific research.

Prompted by an interest in a publication that described effects of forestry resulting from conversion of pasture to pine trees (“the forestry issue that generates the most debate”), this bulletin is intended to provide a starting point for those involved with afforestation on farmland.

The introduction is a personal viewpoint which considers the need for environmental assessment, asks whether New Zealand is unique (with respect to forestry), assesses the implications of being unique and then considers the central forestry issue.

The main contents of this bulletin (ten chapters and no particular order) deal with the effects of water yield, water quality, soil erosion, soil deterioration, greenhouse effect, aesthetics, forest practices, biological diversity, pests and disease, and...