



Editorial

Farm Forestry – the forgotten cousin?

Agriculturists and foresters (or should that be “silviculturists”) are forging a new understanding. There is far greater tolerance of the other’s point of view. This was not always the case. There was a time when the Government provided funds to the Forest Service to encourage forestry on farms, while at the same time the Ministry of Agriculture was focused on maximising the country’s farm production. Remember Muldoon’s “two blades of grass where there was one”, and the notorious Livestock Incentive Scheme and Land Development Encouragement Loan.

The Ministry of Agriculture now has a focus on sustainable land-use (not agriculture specifically); a major shift from their earlier focus on maximum agricultural production. Some would say the change was not soon enough. Whatever the case, forestry’s role as an accepted land-use can only benefit from MAF’s more balanced approach. The rural community’s attitude toward forestry, whether leading or following MAF is debatable, has evolved a great deal since the 1940s and 50s. It is interesting to read Forest Service reports from that era, recording the Station concerns that local farmers might attempt to burn forests, such as an anathema was planting trees to a pioneering culture less than a generation out from the bush-burn. Vestiges of that attitude still remain, with Country Calendar documenting the romantic vision of the pioneer “beating back the bush” in the Wanganui hard hill country (for the umpteenth time) only a year or so ago.

Significance of “Non-corporate” Estate

Perhaps because of these past differences, foresters have tended to overlook farm forestry and the rest of the “non-corporate” estate. When they have accorded it a sideways glance, they have underestimated its importance to the sector – and its potential, particularly away from the central North Island. Not unlike the general public’s misconceptions of the significance of the forestry industry, foresters may not appreciate the independent estate’s importance until things start to happen: when the wood starts to come on stream and they begin to organise them-

selves and develop some muscle. This will begin to happen at the turn of the century, coinciding with the maturation of a resource that started to realise significant planting levels from the early 1970s with the Government’s Grant Scheme. The independent sawmillers are already aware of the non-corporate estate’s importance, particularly since the export log price rise.

New Plantings

Some regions around the country have as much as 35% of the total estate in the hands of farm foresters and other concerns not associated with the large corporates, with localised areas being well above that. Of more significance is the momentum these growers have developed. The 1992 new planting level reached the level not seen since the mid 1980s when the Forest Service and large corporates played the dominant role. Yet these latest new planting figures were dominated by a list that includes smaller companies, local authorities, a rapidly expanding investment float estate, and, most significantly, small growers, principally farm foresters. Indications are that they will also dominate an increased new planting level for the 1993 season. The Farm Forestry Association membership is currently growing at over 10% each year, with a current membership of about 4400.

In 1994 we can expect the large corporates to increase their share of new land plantings, perhaps eventually up to those levels of the mid 80s. Now that the second round of the asset sales is completed, the corporates have less opportunity to expand their estate by buying existing forests, and many have already purchased bare land. Their return will be on top of the existing contributors, and at this rate the FOA and Minister Falloon’s target of 100,000 hectares of new planting seems to be achievable, provided seed availability or some other factor such as land cost does not become a constraint.

Whatever happens, the non-corporate estate, currently estimated at 20% of the total plantation resource, will increase in size and proportion.

Management of the Resource

The farm forestry estate provides some

challenging management options to foresters. Most farmers have different objectives and resource constraints to the corporates and investment groups. That means different management (I risk putting myself on a hobby-horse here – see letters).

A number of surveys have indicated that farmers plant trees first and foremost for shelter, followed by a range of land-use issues such as soil conservation, weed control and a sensitivity to appropriate land-use on a small scale. Profit, or return on investment, is not a high priority, though it’s always at the back of their minds. This reflects the practical reality that trees are secondary to the overall farm business, and cannot be managed in isolation from that business. That means the more usual financial decision criteria that foresters are so familiar with when managing normal (some call it “real”) forestry, are inadequate.

Option Pricing

There is also room to argue some pretty radical notions. One is the concept of option pricing, for which forestry, with its wide biological felling window (from age 20 to over age 60 or more for radiata), is ideally suited. Forestry that is mature on farms provides the farmer with an “option”: to fell or not to fell. That has a value, particularly where the farm financial environment is variable year to year, and as a stock market is month to month. Choosing to sell forest produce in a poor farming year can both reduce tax liability and safeguard farm equity.

In the light of this option, setting a forestry rotation of say 30 years becomes less relevant. Fixing a rotation length might actually be a disservice to the owner.

A Longer Rotation Length

Another interesting aside on this point is the effect a non-realised revenue annuity (due to any option value as well as intangible returns from shelter etc) has on discounted cashflow analysis. The peak of the NPV curve moves out. In other words, a farmer who is advised to fell his forestry stand as if it was part of a normal forestry enterprise may be getting the wrong

advice. Their theoretical "optimum" financial rotation length, for any particular discount rate, may be longer than is customarily thought.

A Lower Discount Rate

Which brings me on to the third radical concept: the application of portfolio theory where forestry is secondary to the agricultural business, and the effect that has on the appropriate discount rate. I can hear the yawns from here. Forestry on farms significantly reduces the farmer's risk. It not only provides a diversification of income source, but is ideally suited to complement farm revenue patterns

through its discretionary harvest ability. On top of that, there are significant intangible advantages ranging from saving weed control and fertiliser costs, through to protecting farm soil resources and sheltering man and beast, all by planting land that is not the best grazing. Sounds like the perfect land-use complement, which more and more farmers believe it is.

If you believe that the overall farm (read investment portfolio) risk is reduced, then the farmer (read investment analyst) can justifiably apply a "risk-free" discount rate of perhaps 3% to 4% real – or so the financial analysts would argue. That would result in a wider range of species

options, longer rotation lengths, higher stockings, and higher pruned heights. The irony here is that many farmers are applying these very options without a rational argument in sight. Whatever the reason they plant, long may it continue.

The editorial board did plan this issue's theme as forestry on farms. However, events such as the export log price rises, the passing of the Forests Amendment Act, and the East Coast kanuka debate, have provided a rash of comment. As Gerard Horgan suggests in his commentary, we do live in interesting times.

Chris Perley

Forestry ownership – some implications of change

Throughout its relatively short history New Zealand has many times been the beneficiary of overseas capital strategically invested in a growing economy.

As a result we have advanced our technology, expanded our markets and increased both our exchange earnings and our job opportunities.

Unfortunately, in more recent years politicians driven to desperation by our balance of payments position have opted to induce further capital into the country by the indiscriminate sale of public assets.

Encouraged by the textbook economists of Treasury, they have placed a price tag on virtually every publicly-owned enterprise, and actively canvassed buyers. Cash in hand has been the major consideration. Scant attention has been given to the future worth of the assets.

The argument advanced has been that by taking the money now we reduce our overseas indebtedness and thus gain an ongoing benefit from the reduced pressure on the economy.

Many assets have been sold, regular sources of Government income traded away, and we have lost control of key industries and resources, but the overseas debt has continued to climb.

Often the value of the assets has escalated quite dramatically once the sale has been made. There is no better example of this than in the forestry sector.

If ever an industry has grown with the country, nurtured by New Zealand hands and resourced by New Zealand dollars, it has been the timber industry – particularly the development of exotic forests.

With a climate that produces year-round growth, both the radiata and Douglas

species have prospered particularly well.

On the technical side New Zealand has led the world in the treatment of radiata, giving it a far greater value than many had earlier dreamed possible. The country owned a resource rapidly increasing in both quantum and value.

There was, however, a myth generated that foreign capital was essential for the industry's development. That need has been grossly overstated and in the lumber industry is a complete fallacy. The necessary capital is available within New Zealand. It is a question of mobilisation, and the key to unlocking the necessary funds is to be found in security of supply and the ability of the processing industry to plan on a long-term basis.

Despite this, there emerged the Treasury-inspired scheme to sell 550,000 hectares of publicly-owned forest. The Government accepted the proposal. The sales were made without any provision for the future of New Zealand's on-shore timber-based industries. The balance between the public and private sectors of the industry, which had seen increasing innovation

* Forest acquisition by foreign companies 1990-92 included:

- Ernslaw One (Malaysia/Singapore) 23,801 hectares
- Juken-Nissho (Japan) 43,531 hectares
- Wenita (Hong Kong/China) 20,521 hectares
- Winstone Pulp International (Indonesia) 8,331 hectares
- Oji Paper & Sanyo Kokusaku Pulp (Japan) 30,232 hectares
- ITT Rayonier (USA) 97,453 hectares

This list does not include all companies deemed foreign under OIC definition.

and an increasing range of domestically based timber processing operations, now faced some risk of destabilisation.

As a country we had become acutely aware of the need to protect our native forests, and successive Governments increasingly intervened in the interests of conservation. When it comes to exotics, however, it is very much an economic free-for-all. Forest ownership has largely been determined by financial muscle and, not surprisingly, an increasing amount of this has been provided from off-shore. *As countries throughout the Pacific Basin have acted to dedicate their timber resources exclusively to local processing, so has New Zealand become more attractive as a source of raw logs. Along with Chile, we seem to have become the variable factor in the supply equation and thus in danger of being manipulated to meet the processing needs of other Pacific countries. At least one international investor has bought into our forests for the sole purpose (inherited contracts aside) of shipping logs.

The export figures for the 1992 trading year show sawn timber at \$297 million but logs at \$369 million. Despite a very significant increase in investment by the New Zealand sawmilling industry, log sales are escalating at a much more rapid rate than those of sawn timbers.

Some overseas forest owners, Juken-Nissho for example, are evolving a significant on-shore processing programme. That, in itself, is a positive development. Such a move obviously recognises the value of our long-term sustainable resource, the skill of our work force, and the benefits of shipping a processed product rather