



A public perception of plantation forestry

I cannot be said to fairly represent the average public in my perception of plantation forestry because I have a long history of commitment to the environmental movement and thus I am perceived by some as a "radical greenie". However, as public perceptions are greatly influenced by pressure groups I've had (and still have) a role in that perception.

In the early 1970s the Parliaments of the day and Forest Service promoted the infamous white paper on the West Coast beech scheme in which 150,000 ha of native forest would be clearfelled, burnt over and planted in pines. I came to hate those pines with a passion and spread the message far and wide. It was the worst possible karma to plant pines on the ashes of native wildlife and trees. We contended that massive loads of valuable top soil would be washed into the creeks in the Grey Valley, storms would more regularly flood Greymouth, pines created a monoculture that would inevitably destroy the fertility of these low fertile soils and they were an aesthetic nightmare lined up like an assembly line of some Orwellian nightmare – in short we had it in for those plantations and those who planted them. And we sold the story well and the scheme collapsed. However, the burn-offs continued on state land for almost a decade longer while the Forest Service napalmed the exquisite Oparara Basin to plant a few more pines (as if there weren't already more than enough introduced aliens such as sheep and possums) that would probably never be logged. I believe the public largely agreed with us.

My next negative affair with pine plantations came when I was a member of the Nelson Catchment Board. This time I was in an unholy alliance with the Federated Farmers (the far left embraces the far right!) arguing against vast pine plantations in the Marlborough Sounds and on the Moutere gravels. These pine plantings, apart from the previous ills I have catalogued, were going to dry up the catchments of farmers (and we certainly didn't let science stand in the road of this "observable fact"), cause major headaches when they were clearfelled with soil, off-cuts and logs polluting our fresh and salt-water watercourses, and we got very serious about the question of what to do with all these huge plantations when they

matured. We told the public that at the rate of subsidised planting that occurred during that period there would be enough pine resource to establish a new pulp mill every three years from the year 2000 onwards and that within a decade this path of progress would cause enormous pollution and use as much electricity in that one sector as was used by the entire country in the 1970s. The upshot of those arguments is that there was a considerable reduction in planting targets, the removal of government subsidies and an increase in unprocessed log exports. However the question of energy requirements far beyond the year 2000 and the matter of water reduction in dry catchments are still being debated, and rightly so.

Address by Craig Potton to the NZIF 1994 Conference

Those were depressing days, times of bitter struggles against the Forest Service, large corporations and every man and his dog who threw matches at the countryside. But worry not, this talk has a profoundly happy ending. Peace and enlightenment has come in our times and I am grateful to those who made the initial breakthrough. Social change is often made by just a few individuals and in this case it was Gerry McSweeney of Forest and Bird and Bryce Heard of Tasman Forestry, who sat down like Arafat and Rabin, and drew up the Tasman Accord. In the Accord Tasman would stop clearfelling its native forests, create 40,000 ha of reserves and Bryce would also, as President of the Forest Owners' Association, then convince the industry to follow Tasman's example and enter into a similar Forest Accord style of agreement. For our part of the deal we would support plantation forestry as a desirable renewable resource for the world market that can release pressure on indigenous forests worldwide and create products that are environmentally friendly and sustainable. Two years after the Tasman Accord, the New Zealand Forest Accord was signed, heralding in the new age. Nature breathed a collective sigh of relief and apart from a few rearguard skirmishes, all has been sweetness and light.

I don't have time to read the objectives

of the Accord to you but strongly recommend it as bedtime reading – it is an epoch-making document and one which has done more than anything else to alter the public perception of plantation forestry.

I'd like to finish by addressing several key issues I was asked to address in as much as I can make well-informed guesses as to today's public perception of forestry.

Firstly: does the public perceive plantation forestry as being an important land use or is it still seen as secondary to farming? My assessment here is that with the exception of most farmers forestry is accepted as a major land use, job creator and export earner. It's bleedingly obviously so and most district and regional schemes treat it as a predominant use in most rural zones.

Secondly: How is plantation forestry perceived in terms of aesthetic appeal and recreational importance? The answer to this is definitely equivocal. Aesthetically it doesn't have the pull of native forest but it is equal to the great monocultures of introduced grasslands. The grid pattern is definitely a drawback, as is the lack of variety in species. Recreationally, forest plantations have become an excellent venue for off-road activities like horse riding, trail biking, mountain biking and exploratory drives down aisles of trees. Thus it creates a great place for activities that would impinge on those who like to walk in solitude and silence in our indigenous estate.

Thirdly: How aware are the public of opportunities for investment in plantation forestry? The mid-eighties have a lot to live down in this respect. To the small investor the Forest Products games were too large, international and abstract to give much sense of involvement or pride. Other companies like Tasman have built a very solid economic base that the community can more easily relate to. However, my overall feeling is that in many ways the money games that are played are just too large and the planning horizons too long to expect everyone and anyone to invest.

Fourthly: Is there a good knowledge of what actually goes on within our forests and processing plants? People can certainly see it when it's cut down – there's

nothing subtle about clearfelling – and they can also see smoke out of the top of sawmills and pulp mills, and observe the sludge pools. They can also experience on a daily encounter logging trucks driving too fast. These are all important observations to be addressed by the industry if it wants to appear more understanding as well as being understood.

Fifthly: how effective has the forest industry been in enhancing its image and improving public understanding to date? I'd give it 43 out of 100. To really compete in a new age, pluralistic society it needs to address some of the perceptions posed in my third question regarding forestry investment. It will all come off the bottom line but you'll have to mix up the plantings, log more carefully, drive

slower, knock out pollution, support community projects, employ more women and generally exhibit caring attitudes. Plantation forestry is actually a winner in the new age – it's even "high fibre". You could do a lot better on this one. Credit where it is due – a company like Tasman has made some very enlightened decisions with respect to community projects under the Tasman Accord. These have been very real and appreciated moves.

My sixth and final point concerns wilding pines. I want to make a plea for keeping pines in their place. Pines have spread from plantations across the high country and the great deserts of Rangipo and Mackenzie, in the process creating unacceptable visual and ecological damage. Wilding pines on the South Island

high country, for example, are both a visual blight and threat to important ecological areas. I believe forest owners should accept some responsibility for preserving the character of the surrounding landscape by controlling wilding pines. Similarly the encroachment of pines from plantations into conservation areas (the Nelson Mineral Belt is one of many local examples) is a continual source of public annoyance and concern at the speed with which they are spreading. It seems to me that this spread is simply accepted and that DOC is expected to expend public money to remedy a problem created by the private sector. Landowners and exotic forest owners could definitely do more on this one.

Critique – Economics and Ethics: approaches to sustainable forest management

In his paper on sustainable forest management, S.D. Richardson (1994) makes several provocative remarks about, and interpretations of, economic theory and its application to his central topic. This note is one economist's reaction. A caveat: as will perhaps become obvious, I am not a forester, a forestry economist nor even an economist specialising in natural resource issues. Rather, I am a neo-classical micro-economist and my reactions are from that perspective. My overall position is that I agree that the application of economic analysis to the very difficult practical problem of forest management has its shortcomings. However, I do not think that these shortcomings have implications for economic theory that are significant as the author seems to believe, nor am I convinced that there are alternatives that suffer from fewer practical problems. The following remarks respond to Richardson's points in roughly the order in which he raises them. Unless otherwise noted, all quotations are from Richardson (1994).

In the very first paragraph he writes: "It is the preoccupation of economists with the short-run ...". True, the Keynesian model is a short-run macro model, but to pick that out and thence generalise to economics as a whole is like citing Lamarckism as a preamble to, "it is the preoccupation of biologists with the length of giraffes' necks ...".

"An implicit value judgement in classical cost benefit analysis is that irreversible consequences of action are no more important than if reversible." I suppose the word "classical" gets Richardson

off the hook here, but the statement is simply not true of modern economics. As a fine example, see Dixit and Pindyck (1994) for a reworking of the theory of business investment in the light of irreversibility, using modern option pricing theory. In fact, the application of option pricing to non-financial contexts is increasingly widespread and what Richardson may be observing is the lag-gardness of economics practitioners behind theoretical developments.

A small historical note: the "Ricardian capitalist concept" Richardson notes as being close to the Marxist notion that natural resources have no economic value until there is a labour input, is more than close. The classical Ricardian model is exactly a labour theory of value. I know of no reputable economists who have expounded such a thing in the last 40 or 50 years. It has even been suggested that Ricardo's choice of such a model, in 1817, was not from any conviction about the labour theory of value, but rather because the model's implications are extraordinarily clear – one of his prime intentions was to militate against the Corn Laws, the main beneficiaries of which were powerful landowners, and he chose his model, so the argument goes, precisely because there are no losers from free trade in such a model.

Regarding Knetsch's comments on some differences between people's behaviour in practice and in economic models, the notion that discount rates are not constant over time is hardly going to upset any carts in the temple. Constancy is a

convenient assumption but it is not an implication of theory in any way, nor is it a necessary part of the economic canon at all. I don't think that demonstrating that discount rates vary over time presents an "anomaly" of any sort. Two other points on this. First, Richardson cites Goodland and Ledec (1987), "even ... inaccurate estimates of environmental benefits and costs are better than none, because the alternative is to assume implicitly that these benefits and costs are zero."

Similarly, the notion of fluctuating discount rates may be appealing on the basis of introspection and experiment but, in practice, how does one determine the appropriate time-path for discount rates? If a project has high up-front costs but delayed benefits, a path of increasing discount rates will likely reject it, whereas one of decreasing rates might accept it. The alternative to constancy, one fears, is a pattern that supports the conclusion the analyst wishes to reach. Second, the issue of the appropriate discount rate is really only significant over the very same short-run that Richardson decries as being economists' myopic preoccupation. The reason is simply that costs or benefits occurring well into the future are substantially reduced by discounting, so the effect of using different discount rates is lessened. To illustrate, suppose I have a project with an up-front cost of \$150 but a (certain) benefit of \$10,000 that accrues in 50 years. If we assume a constant discount rate of 10 per cent, this project is unattractive: the present value (PV) of the future benefit is less than \$86. Suppose,