
Special Section: Beech Forest Management

Beech Scheme — an Ecological and Economic Fiasco

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MAF's consultation on Timberlands' beech management plans has sought public comment on how West Coast beech forests should be logged, rather than on the more fundamental question of whether these forests should be logged at all.

Forest and Bird believes that there is no ecological, legal, economic, social or other justification for the beech scheme. Any domestic demand for beech as a timber can be met from private land. Some 40 beech management permits and plans approved by MAF would if implemented, provide more than five times the current domestic market demand for beech of around 5000 cubic metres annually.

The 98,000 ha of beech and beech/podocarp forest affected by the Timberlands' scheme have important biodiversity values because they are virtually all lowland forest below 700 metres in altitude. Lowland forests are one of our richest ecosystems with a greater abundance and diversity of native plants and animals, than montane forests. With less than 15% of New Zealand's original (pre-1840) lowland forests remaining, they are also one of our most extensively depleted ecosystems and severely under-represented in protected areas, including on the West Coast.

A 1997 report by the Department of Conservation (DoC) noted that, "The most important conservation imperative for the survival of threatened species and representative ecosystems on the West Coast is the protection and restoration of low altitude ecosystems, and especially those which link or buffer existing protected natural areas". Most of the Timberlands' managed forests adjoin conservation land.

The weighty 1997 State of the Environment report concluded that, "biodiversity decline is New Zealand's most pervasive environmental issue", and that two of the major pressures on indigenous biodiversity are insufficient habitat in lowland areas and the declining quality of many of the remaining land and freshwater habitats. Beech logging will exacerbate this.

The forests are home to a raft of species threatened with extinction such as mistletoe, kaka, kereru, parakeets, great spotted kiwi, blue duck, bats, and native

fish in forest streams. Preventing their slide into the void requires protective habitat management and dedicated control of introduced pests, not further encroachments on the areas which sustain them.

Timberlands' reliance on the West Coast Accord as requiring a beech scheme ignores the 1995 decision by the High Court in the West Coast forests case that the Accord contained no commitment to a beech scheme of any size or quantity and that Government had fulfilled any Accord undertakings by inviting tenders in 1987.

The company has studiously ignored the policy constraints on any beech scheme in the supporting document to the Accord, the Final Report of the Forest Working Party. These included that any beech scheme be small scale, environmentally acceptable, subject to environmental impact assessment procedures, and produce timber for a domestic rather than an export market.

The shattered expanses of the once magnificent rimu forests of lanthe and Wanganui demonstrate the failures of past experimentation with 'managing' large areas of public indigenous forest for timber. Despite its 1990s' rhetoric of sustainable management, the beech scheme is likely to be a similar destructive experiment, partly because of the huge unknowns in logging beech over an 80-100 year rotation on the scale proposed. There has been no research on the impacts of repeatedly picking away at the forest, on ecosystem processes including nutrient cycling, and species diversity and abundance.

The forest growth model on which the sustainable yield volumes are based is problematic.

There are no published research trials using similar forest types to those proposed for logging which establish the rates of recruitment, rates of tree growth from size class to size class and hence the total productivity in terms of biomass or timber yield. Without this information, the accuracy of the model predictions cannot be gauged.

The model is also species specific. It produces separate and independent predictions for each species without any apparent input about the relative propor-

tions of the different species in different forest stands. Silver and red beech mixtures are dynamic with proportions which change through time depending on the disturbance regime. While implementing the plans may retain a beech forest, ultimately its relative species composition and size class structure will reflect decisions made by Timberlands.

'Improvement felling' to increase future timber yield will progressively turn natural forests into timber plantations akin to intensively manipulated European forests. In the Maruia forests more than 22,000 trees will be felled to waste each year, on top of the nearly 10,000 trees extracted. DoC has described Maruia's magnificent red and silver beech forests as providing 'outstanding wildlife habitat'. The plans pay little attention to the likely impacts of such a felling regime on habitat values.

The company strives to create the impression that logging's impacts will be offset by extensive pest control. There is no science which proves this. Whether such ecological balancing out would occur is highly debatable.

There is also a gap between Timberlands' public relations rhetoric and reality. The Maruia management plans contain no commitment to any active control of feral cats, red deer, pigs, goats, or wasps. Possums will only be controlled in 'hot spots'. No immediate control of stoats, a major predator of native birds, is proposed unless a small research programme over the next 10 years yields positive results.

The public can have little confidence in Timberlands' sustainable management claims when these are not substantiated by any comprehensive, independent scientific or other evaluation. The scientific community, like the public, has had a mere eight weeks to examine a bulky pile of documents. Treasury's manipulation of policy making means that even MAF and DoC's assessments of the plans against the Forests Act criteria have not been released by those agencies to assist public submissions, despite Official Information requests.

Contrary to the understandings behind the Accord, no assessment of environmental effects is publicly available. Nor has any "independent multi-disciplinary

technical team" been appointed to audit such an assessment as the Parliamentary Commissioner for the Environment recommended in 1995. The Resource Management Act is little help in providing an opportunity for independent evaluation. Timberlands has been able to avoid applying for land use consents because no vegetation clearance provisions currently apply in the Grey or Buller Districts.

The beech scheme has all the makings of an economic as well as ecological fiasco. The scheme is financially attractive to Timberlands because it gets the forests for a song, paying a royalty of only \$5 per cubic metre for logs sent to the sawmill (but not those downed by "improvement felling"). Despite the profligate destruction caused by the Buller overcut and

before that, clearfelling in central and South Westland, rimu logging has provided scant returns for the forests' owners — the New Zealand public. Only once in its eight year existence has Timberlands paid a dividend to the Crown. In the 1997/98 financial year it paid a paltry \$26,000 in income tax and \$165,000 in royalties.

The dollar returns to taxpayers from beech logging are likely to be similarly insubstantial. Timberlands has no definite market for the timber volumes it seeks to produce. Beech's reputation as a timber which is difficult to mill, has a high wastage factor and a lengthy and costly drying process makes market demand very different from rimu.

Forest and Bird believes West Coast

communities would benefit more if Timberlands were wound up and its exotic forest cutting rights sold. The proceeds and the unspent part of its suspensory loan for special purpose plantings in South Westland could help fund long overdue upgrades to Westport, Greymouth and Reefton's sewerage systems and the Coast's many sub-standard rubbish dumps, boost tourist promotion and improve tourist facilities such as roadside tracks and visitor centres.

New Zealand's indigenous biodiversity has been devastated by 1000 years of human settlement. Logging 1000 square kilometres of forest to produce timber for which there is no market is a conservation tragedy.

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Conservation Through Sustainable Beech Forest Management: Breaking the Historical Shackles of Conservationists and Foresters

Dr Henrik Moller* and Ecosystems Consultants

Timberland West Coast Ltd's (TWC) proposal to sustainably manage beech forests deserves the support of New Zealand's conservationists and foresters. There is undeniable scientific evidence that past methods of using indigenous forests have often been unsustainable and ecologically damaging for native species, some of which are now threatened. But TWC has listened and learned. They are spearheading a low-intensity forestry approach

based on minimal off-take, little forcing or pushing of the ecological system, and adding ecological value to their forests through predator control. The resulting 'Natural Forestry' approach represents a paradigm shift that is long overdue in New Zealand and overseas. Unfortunately recent public statements suggest that many conservationists can not adapt to TWC's challenge, nor divorce their religious fundamentalist beliefs from scientific inference that the proposed forestry represents a commendable compromise between conservation, economics and other societal needs.

Safe-guarding ecological habitat values

TWC's plans do not involve any clearfelling. Instead groups of 1-10 trees will be removed to create a gap in the forest of the size that naturally occurs when trees die or are blown over. On average only 15 trees will be removed every 15 years per hectare. Trees will be selected in a representative manner so that the naturally occurring size structure and species ratios are little altered by logging, with one important exception — all the largest

living trees and dead standing trees will be left untouched. These large, often gnarled trees are important food sources for birds and have more holes suitable for nesting and roosting by some native birds and bats.

Woody debris will be left on site to harbour habitat for native insects, and to continue natural processes of nutrient cycling and soil formation. Timber extraction will be by helicopter, thereby greatly reducing roading for the industry and minimising damage to the forest from drag lines.

Common sense and our scientific knowledge of forest processes suggest that ecological impacts will be minimal and much less than from past unsustainable forestry practices.

Foresters as gamekeepers: adding conservation value to the foresters' estate

TWC foresters have correctly identified that protecting habitat values alone will not retain the biodiversity values in their forests. They propose to control introduced predators (stoats, rats, possums) in some areas to restore populations of birds, lizards and insects to their former abundance in the same way that the Department

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