

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.

Special Section: Beech Forest Management

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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of Conservation now does. This is part of a paradigm shift in New Zealand's conservation management as a whole towards a more active interventionist approach. In the past we have used passive measures like translocation of threatened species to offshore islands, fencing, and reservation. By themselves these are not enough to halt the decline of mainland species threatened by introduced species. Predator control is expensive and must be maintained in perpetuity, rather like a gardener continually weeds out the unwanted species to allow others to flourish. TWC proposes that some funds from genuinely sustainable forestry will be invested back to create a net conservation gain from the industry.

Co-management of conservation: The way forward for New Zealand

Devolving responsibility for conservation to local landowners, community and iwi groups and commercial enterprises is called "co-management". This small scale, local, bottom-up approach is the way forward for conservation in the 21st century. Conservation NGOs overseas like the International Union for Conservation of Nature (IUCN) and the World Wide Fund for Nature (WWF) have captured enormous biodiversity benefits by encouraging co-management. New Zealand lags well behind this international trend, partly because our conservation NGO leaders have chosen to promote a myth that the only way to safe-guard conservation is by public ownership and management by a huge taxpayer funded bureaucracy like DoC.

Conservation through sustainable use

The TWC plans also have my full support because they are a scientifically based example of "conservation through sustainable use". I was an environmental activist calling for preservation and reservation in the 1970s and 1980s to halt widespread state-funded habitat destruction by unsustainable forestry. Preservation was a necessary emergency measure as native forests were clear-felled or heavily cut over.

Preservation had its place then and now. But now the emergency has passed. We are the envy of the world in our generous allocation of land to National Parks and reserves. The new challenge facing the New Zealand conservation movement is to capture biodiversity gains outside the nature reserves by fostering wise land and natural resource uses. Conservation should not just occur within some line on a map around a reserve. At its worst this misconception creates an environmentally damaging idea that if we have reserves for conservation, then we can do what we like to the environment outside them.

Adaptive forestry management and the politics of proof

There are many unknowns in the ecological systems operating in beech forests, and TWC's approach is so innovative that only experience will allow fine-scale tuning of their management to maximise the gains for biodiversity and forestry income. Preservationists have already highlighted these unknowns and claimed that the ecological precautionary principle precludes any commencement of forestry until experiments are completed. I doubt that experiments could ever be mounted on realistic temporal or spatial scales to satisfy such sceptics, but well structured and monitored management interventions can. All management is an experiment if it is designed and monitored well. Exhaustive research commissioned by TWC has ensured best professional practice by identifying best guesses about how the system will respond to timber extraction. Their low intensity forestry approach, and stringent scrutiny through independent audits promise that learning through an active adaptive management approach will occur with minimal ecological damage. The TWC proposals therefore challenge the conservationists to accept another paradigm shift — to allow controlled large-scale but low intensity cropping before all the unknowns are researched. It matters little to such preservationists that similar scale unknowns exist in how to best manage New Zealand's reserved land, yet that knowledge gap is not ceased as a warrant to expunge all National of Forest Parks. I have become increasingly cynical about the way resource users and use prohibitionists both escalate a battle of unknowns to justify what are fundamentally religious stances: to use or not to use natural resources.

Abuse of science in the name of conservation

Some conservation NGO leaders and politicians are still locked in a warrior mode that prospers by talking up conflict and abusing science. Such people are well meaning and tireless soldiers for the environment, but will not always get the best outcomes for biodiversity in our 21st century. Comments reported recently in newspapers by The Royal Forest & Bird Protection Society, claim that there is scientific evidence that logging of any sort harms biodiversity. Worse, Jill Pettis, MP, and Labour Spokesperson for Conservation circulated a discussion paper on TWC plans that implies that TWC will turn the "wild forests" into "plantation-typed managed forests" and that "it is certain that any type of logging causes long-term changes in forest composition and structure". None of these statements or impli-

cations even approximate the truth. Much has been made of a statement of "thirteen independent ecologists" who concluded that the TWC's beech use scheme was "almost certainly unsustainable". The only problem was that these scientists made that statement in November 1997, at least 6 months before the plans were even finalised, let alone distributed. How could they know without looking at the evidence? Recently the conservation NGOs made repeated public statements relaying an even more exaggerated version of the thirteen's conclusion. Not one of the signatories offered public peer review of the NGO's misrepresentation of their letter, nor a disclaimer that their premature statement was made before they were aware of what was actually being proposed. New Zealand needs better leadership of conservation by its ecologists than has been evident so far on the TWC proposal debate.

Exaggeration and distortion of the facts may win a few recruits to the conservation lobby in the short-term, but in the longer run it will alienate New Zealand society and turn-off supporters. The "never cry wolf" lesson applies to those who would abuse science in the name of protecting the environment. Rank and file New Zealand's can hardly be expected to accept commercial or social penalties to safeguard environmental values if they do not trust the scientific testimony of those making public statements for conservation.

Amongst the Conservation NGOs only WWF and the Maruia Society have avoided the temptation to undermine TWC's plans to nurture a 'sacred cow' of our conservation history and conservation religion — the idea that use of native forests must be ecologically damaging no matter how it is done.

Private company investment in research and active ecological restoration offer tremendous gains for conservation and welcome relief to our Department of Conservation who we expect to work ecological miracles on a shoe-string budget. Conservation NGOs and our politicians should be welcoming the assistance of industry for conservation in this way, not spreading misleading half truths based on out-of-date characteratures that all forestry is a threat to conservation.

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