

# A new approach to farm forests based on incentives rather than punitive regulation

BY JERRY VANCLAY

The challenge for government is to reward and encourage conservation and good silviculture of private native forests, while allowing a profitable and sustainable timber harvest to supplement farm income. Unfortunately, the existing market and regulatory regime does not favour good husbandry of private native forests.

The Southern Cross Group started from the premise that penalising landholders who have preserved their private native forest is unfair, and will not encourage further conservation. They believe that incentives are more effective than punitive regulations, and that good stewardship of farm forests should be viewed as an environmental service to be recognised and rewarded, rather than a burdensome responsibility enforced by legislation.

## UNDERSTANDING THE ISSUES

Private native forest policy will only be effective in the long term if it recognises the ecology and economics of forests, and the attitudes of farmers. Farmers, like most of us, respond better to incentives than to regulations.

Forests are dynamic, and initiatives should work with these natural processes of change. Thus regulations seeking to maintain the status quo may not have the desired effect as they fail to recognise this essential forest dynamic and are antipathetic to the social perspectives of the farming community.

## DYNAMIC FORESTS

Trees germinate, grow and die. Fires, storms, floods and droughts all leave their 'footprints' in the forest. When the whole landscape is forested, these forces create healthy diversity, but their effect can be different when forests are fragmented by an agricultural or urban landscape.

In such landscapes we have no choice but to manage vegetation actively to avoid all-or-nothing disasters (like the fires that burned most of the Snowy Mountains National Parks in 2003). Active management is especially necessary where exotic weeds or feral animals may impede

natural processes (by competition, browsing, or by interfering with pollination or seed dispersal).

In an environment where forests are fragmented and affected by weeds and feral animals, 'fence and forget' is simply not an option. Good environmental outcomes for most forests depend on active management and, especially in the case of private native forests, incentives for continuing management.

## ECONOMIC REALITIES

Timber production from native forest is a marginal enterprise in much of Australia. The value of timber is relatively low compared to the cost of transport, so most timber is unsaleable unless it is within 100km of a sawmill. The slow growth of trees, coupled with the low intrinsic value of timber in the marketplace, means that most forests accrue value more slowly than interest rates, so the financial signal to a rational landholder may be to harvest at the first opportunity, especially when sovereign risk is considered.

Harvests in private forests commonly seek to maximise the value of the current harvest, without regard to future productive potential. Such practices have degraded many forests, altering the species composition both directly through removals and indirectly by failing to create suitable conditions for germination and growth of key species.

The silvicultural intervention needed to restore these forests to their full productive potential - whether for the production of timber or for ecological values - is not financially attractive. The result is that without incentives, most private native forests are likely to remain degraded and neglected.

## ATTITUDES OF FARMERS

Australians have a reputation of being proud and independent, with a keen sense of fairness and a dislike of government interference. Farmers are no exception, and many anecdotes suggest that unwelcome legislation will be resisted.

Much private native forest is remote from roads and neighbours, so monitoring surreptitious clearing or poor logging practice is likely to be difficult and expensive, especially in an environment where trust is lacking.

## Birth of the Southern Cross Group

A decade of negotiation on legislation and regulation in NSW stalled last August when the NSW Minister for Natural Resources discarded the draft Code of Practice for Private Native Forestry, and called for stakeholders 'to negotiate it out themselves'. Progress on the issue has been mired in negotiations about overly-prescriptive regulations.

In frustration over the lack of progress and the pre-occupation with prescriptions, a group of forest researchers and practitioners began to discuss alternatives. Email correspondence blossomed into a publication urging stakeholders to consider a new approach. The proposal has benefited from scientific peer review, and now awaits adoption, adaptation and uptake by other stakeholders.

That proposal *A proposal for stewardship support to private native forests in NSW* is available for free download from [www.privateforestry.org.au/SCG.pdf](http://www.privateforestry.org.au/SCG.pdf)

The Southern Cross Group of Forest Researchers and Practitioners is a group of individuals with experience and expertise in forestry and forest

ecology, who work to foster better management of Australia's native forests. It includes:

- Prof Jerry Vanclay, Professor of Sustainable Forestry, Southern Cross University;
- David Thompson, Centre for Agricultural & Regional Economics Pty Ltd;
- Prof Jeff Sayer, formerly Prince Bernhard Chair of International Nature Conservation, Utrecht University;
- Dr Jeff McNeely, Chief Scientist, World Conservation Union (IUCN);
- Dr David Kaimowitz, Director General, Center for International Forestry Research;
- Alex Jay, Northern NSW Branch President, Australian Forest Growers;
- Anne Gibbs, Community Natural Resource Management Support Officer;
- Heather Crompton, past President, Institute of Foresters of Australia;
- David Cameron, Committee Member, NSW Farmers' Association;
- Dr Ian Bevege, Member, Institute of Foresters of Australia.

In this context, offering an incentive for good stewardship is more likely to be effective than imposing regulations restricting harvesting.

#### A NEW APPROACH

Forests should be seen as core business for farmers, both as part of their income stream and as part of their environmental stewardship responsibilities. Current market forces and existing regulations do not send helpful signals for private native forestry in Australia. This is in contrast to Europe, where revenues and government subsidies create a strong incentive to manage forests in a 'close-to-nature' manner.

Despite a long tradition of 'continuous-cover' forestry in Europe, it is these annual revenues (up to \$90/ha/yr) that motivate management for multiple use rather than exploitation for timber. Increasingly, countries are realising that community interests in environmental services provided by forests cannot be met by 'free-loading' on timber revenues, and that incentives are needed to ensure that these services are provided in the way that the broader community desires.

The challenge is to devise an equitable scheme that:

- Sends the right signals for forest management;
- Is cost-effective to administer; and
- Represents a worthwhile investment in terms of the public good generated.

While multiple-use forestry has been the paradigm in Australian public production forests for some decades, many initiatives for private forests have focused on single use (e.g. conservation covenants) and on single indicators (e.g. hollow trees), both of which have limitations. Landholders may not wish to make a permanent commitment to a conservation covenant, and composite indices often prove to be simultaneously too simplistic to quantify habitat, and too complicated and expensive for landholders to apply.

Rather than having complicated targets, a simple two-tiered system can create the incentive to provide the environmental services desired by the community.

#### TWO TIERS OF REWARDS

The first tier rewards and encourages landholders to regenerate more forest and to stimulate tree growth on private land. This could be done through an annual payment based on the standing basal area in native trees. This would offer an incentive to encourage more trees, to allow them to reach bigger sizes, and to invest in silviculture for faster tree growth. Although a relatively 'blunt' instrument, it is attractive because it is amenable to self-assessment, is easy to audit, and adjusts automatically for land quality. Moreover, it represents a simple method for teaching landholders about the basics of silviculture and helping them to understand the response of forests to active management.

The second tier rewards and encourages stewardship of endangered species, for instance by offering a subsidy based on the contiguous area of suitable habitat, triggered only on an authenticated record of a species within that habitat. The simple expedient of allocating equal



*The silvicultural progression in private native forest from unmanaged to thinned and finally restored. Photos: Sean Ryan, SE Qld PFDC.*

funding to each endangered species would adjust automatically for rarity, with the largest subsidies accruing to species that are rare or confined in their distribution. Basing the subsidy on habitat area avoids the need for expensive surveys, while an authenticated record retains an incentive to control predators. Restricting the subsidy to contiguous habitat encourages the creation of corridors and fosters collaborative management between adjacent landholders. The incentive fosters an awareness of endangered species, and a balance between wildlife, timber, and other farm pursuits. It would also overcome the current situation where many landholders regard the presence of a threatened species on their land as a liability. A system of financial reward makes these species an asset.

Both tiers should be voluntary, with landholders who elect to participate doing their own self-assessment (or buying their own independent advice). The first tier is amenable to self-assessment after minimal training, which can also be the vehicle to inform landholders about good silviculture.

The normal avenue for second tier support may be to engage an expert to search for and advise on suitable management of any threatened species on the property. Expert input in this form would overcome the dangers of blanket regulations, and would allow management regimes to be customised for each situation. Depending on the species involved, such advice may involve, for example, changing fire regimes, managing weeds, controlling feral predators, fostering native understorey species, fostering tree hollows for wildlife, or thinning some trees to stimulate nectar flows in the residual stand.

The benefits of such a stewardship scheme are that it would:

- Stimulate landholder interest in forest management for economic production and biodiversity conservation;
- Provide financial support for rural communities;
- Provide reliable resource data on the private native forest estate;
- Provide additional data on the distribution of threatened species;
- Reassure the community about the state of forests and wildlife; and
- Offer an incentive for the control of woody weeds, if exotics are excluded from tier one incentives.

#### TOMORROW'S FORESTS

Incentives for good stewardship by landholders are necessary for healthy private native forests, but they are not sufficient. Future timber harvests from native forests are rarely enough to finance investment in silviculture, so timber harvesting may provide the only economically viable opportunity for silviculture. Stands most in need of silvicultural intervention are those that have been high-graded excessively in the

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### **RETAIL FORESTRY IS GOOD FOR GOVERNMENT REVENUE**

Contrary to the woefully ignorant commentary that MIS forestry deductions are a tax subsidy, it is easily demonstrated that retail forestry generates far more tax revenue than is deferred through growers' business deductions. Deductions

are quickly matched as assessable income in the hands of the MIS companies, employees and contractors, and income tax is later paid on harvest returns. The independent research house, Australian Agribusiness Group, estimates Government income tax revenue at three times the growers' deductions for the 2005-06 MIS forestry and agribusiness projects.

The term 'tax revenue lost because of retail forestry' is a gross misrepresentation. The imaginary 'lost revenue' would not be miraculously available for schools and hospitals, because if retail forestry was not available, investors would otherwise turn to investing in superannuation and negatively-g geared share and property portfolios. These alternative investments are even more 'tax effective,' meaning that they cost far more to revenue than retail forestry.

### **PROJECT COSTS AND COMPANY PROFITS ARE NOT EXCESSIVE**

Independent research appraisals and ratings demonstrate that project fees and company profits are not excessive and that grower returns are within acceptable investment ranges, contradicting another furphy spread by detractors. Project fees are set within a highly competitive market.

For listed retail forestry companies, Returns on Equity (ROEs) at 11-20 per cent are mostly lower than the ASX 200 and related indices - and much less than, for example, BHP and CSR (~30%), the Reject Shop (~37%), Just Group (~69%), or Aristocrat Leisure (~67%).

Project costs are similarly misrepresented by critics. A per hectare planting cost of about \$1,600/ha for a do-it-yourself 'commodity' farm forester is an invalid and misleading benchmark for assessing costs in retail forestry projects. It's like comparing a DIY house extension with an extension built using a professional architect and master builder.

Retail forestry covers much more - professional quality management on a large scale over diverse locations, sites, species, agronomy, silviculture, and target product; marketing the pooled forest produce on behalf of the growers; developing the financial product, and meeting strict legal compliance requirements; marketing and distributing the project offer documents; maintaining company infrastructure, systems and personnel. In a typical \$7,500/ha project, about two-thirds over the life of the project would be for plantation

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past, or that have regenerated as a dense thicket (e.g. after removal of grazing or cultivation) unable to self-thin. In both these cases, forests may be filled with trees of no current commercial value, that are too small and slow growing to provide much wildlife habitat (e.g., hollows) or sustenance (e.g., grass, pollen, nectar).

Silviculture could liberate these forests for both production and conservation, but is financially unattractive. In some forests, the tier one payment may be enough for landholders to intervene and stimulate growth, but many will need a stronger incentive. A market for wood residues could provide such an incentive, and could lead to a re-invigoration of many degraded forests. Biofuels are a possibility that warrant further research.

In the past, logging contractors have had a vested interest in maximising the current harvest and ignoring the future productive potential. In the future, because of the high cost of individual silvicultural operations, 'chainsaw silviculture' will remain the most critical operation undertaken in the forest, with the key decisions being taken by the contractor undertaking a timber harvest on behalf of a client. Thus the new generation of contractors should be certified in silviculture as well as logging techniques, to work with landholders and their advisors to harvest forests with a view to creating the best long-

establishment, management and support systems, and about one-third as a margin, on which tax is paid.

MIS forestry is an easy but wrong 'target' for those who oppose land use change and higher rural land values

This statement refutes another vexatious claim by ill-informed critics. Retail forestry is but one of several competing land uses in a highly competitive rural land market putting upward pressure on rural land values. Other competitors include farm consolidation, broadacre cropping, dairy and beef cattle expansion, intensive agriculture, urban encroachment, rural subdivision, and 'lifestyle farming' - especially near the coast and near regional centres.

The changes these competitors represent have been taking place against the background of the relentless decline over decades in the number of family farms, in the profitability of smaller and inefficient farms, and in 'next generation' family farmers.

In 2004, only three per cent of rural land sales were to forestry companies (i.e. 300 out of 10,000). This is a very low proportion of transactions to have had the claimed impact on rural land prices.

MIS plantation companies are increasingly being outbid by local and overseas farming interests, especially NZ dairy farmers, and especially in northern Tasmania, western Victoria and southern NSW.

Communities 'appropriate' landscapes. With the possible exception of urban encroachment, plantations make the most obvious changes to previously 'non-sylvan' and pastoral landscapes, and are thus an easy but wrong target for criticism and blame. In particular, the tax system is most certainly the wrong target, and should not be asked to do what it was not designed for.

### **PLANTATIONS ARE A LIFELINE FOR MANY RURAL COMMUNITIES**

Bureau of Rural Science empirical studies contradict the perceptions, anecdotes and allegations about negative socio-economic impacts of plantations, and MIS plantations in particular.

Retail forestry is offering a lifeline to rural communities and economies suffering long-term decline, by establishing new jobs and businesses, attracting more working-age families, offering new off-farm job opportunities, and keeping open and re-opening community services.

These benefits will expand further as the recent early harvesting and processing stages greatly expand; e.g. an extra 10 direct jobs per blue gum harvesting operation of 100,000m<sup>3</sup> in size.



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term production and biodiversity outcomes. Because it is in the community interest to create this new breed of 'loggers', training and certification of contractors should be publicly funded. These initiatives should be coupled with publicly-funded initiatives to inform and educate landholders about effective land stewardship.

### **CALL TO ACTION**

In our private native forests, many symptoms are clear: the challenge is to diagnose correctly, and to devise effective solutions for good stewardship. One solution is to offer outcome-oriented incentives to the landholders closest to the forests, supported by a system of monitoring and action that promotes and encourages appropriate.

The Southern Cross Group calls on other stakeholders to declare their support, and to participate in refining the concept into a workable scheme that serves the needs of the broader community.



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