

Subject: The perverse negative impact of the PNF Code of Practice on the health and vigour of an inland Southern Tablelands forest

Submission by: Alan Cummine and Sylvia Gleeson, Gundaroo NSW

Recommendation

- ***That the minimum basal area set for 'Tablelands Hardwood' forests be amended to allow for the difference between higher rainfall more productive sites and forest types (such as the more coastal tablelands), and drier less productive sites and forest types, found further inland (such as between Goulburn and Canberra and further south); and***
- ***specifically, that the minimum basal area for the less productive inland dry sclerophyll forest types be set at 8m² per hectare, the same as 'Western Hardwood' forests, rather than the 12m² that currently applies to all the diverse 'Tablelands Hardwood' forest types.***

Issue

Located on our 90 hectare property near Gundaroo, our 15 hectares of dry sclerophyll forest, comprising almost entirely red stringybark regrowth with some scribbly gum and occasional brittle gum, has been steadily 'locking up' for at least three decades. It suffers from excessive stocking and suppressed growth rates, decreasing cover and diversity of understorey grasses and shrubs, and increasing areas of shallow soil that is exposed or covered only in leaf litter that is not breaking down because of low light penetration. The forest desperately needs silvicultural intervention to restore its vigour and diversity.

However, the extent of thinning recommended by several foresters since the mid-nineties (ie, remove 60+ per cent of the locked-up regrowth stems) is not permitted under the current Private Native Forestry Code of Practice. The Code sets a minimum basal area retention of 12m²/hectare for 'Tablelands Hardwood' forests under 25m in height, which would either permit no thinning at all or limit thinning so severely as to have negligible beneficial impact and be an unrecoverable management cost. This limit is inappropriately high for the inland dry sclerophyll forests that abound in a broad belt between Goulburn and Canberra.

Discussion

Summary description of the forest

The structure, composition and condition of our forest was described in detail by a final year ANU forestry student in 2002, as part of a project to develop an ecologically sustainable forest management plan. In summary:

- elevation is between 650 and 670 metres; aspect is predominantly east and east-north-east; and slope ranges from 6 degrees to about 11 degrees at the steepest pinch;
- climate is fairly typical inland southern temperate;
- average annual rainfall is around 650mm, relatively even all year round;
- soils are mostly yellow podzols, derived from sedimentary shale, some patches being fully exposed with a gravelly surface and no topsoil; site quality is highly variable;
- overstorey is dominated by *Eucalyptus macrorhyncha* (red stringybark), with *E. rossii* (scribbly gum) present in patches, and an occasional *Exocarpus cupressiformis* (wild cherry);
- there are two clearly defined overstorey age classes — some large well-spaced mature and over-mature trees (65–100cm dbh), among very large numbers of tall but younger small diameter regrowth (10–25cm dbh of relatively even age); tree hollows are rare;
- understorey is sparse shrubs (mostly tea tree and prickly acacia) and tussock grasses (*Joycea* and *Poa* spp);
- there is abundant evidence of previous utilisation (eg, numerous stumps);
- average stocking is 390 stems/ha, interspersed with patches as dense as 2,900 stems/ha.

Professional foresters' visits and assessments

Since 1995, our forest has been inspected by professional foresters and private native forestry practitioners no fewer than eight times (1995, 1996, 1998, 2002, 2003, 2006, 2012 (twice)), including three relatively detailed assessments. In addition to the forest management plan developed by the ANU final year forestry student (mentioned above) in 2002, the forest was the site of a joint field day in 2006 run by Australian Forest Growers (AFG) and the Southern Tablelands Farm Forestry Network (STFFN) to demonstrate the benefits of thinning heavily stocked dry sclerophyll regrowth forest in the Goulburn–Canberra region. Then in January 2012, another assessment was conducted by Ian McArthur (Farm Forestry Consulting). The most recent assessment was conducted by the EPA's Senior Private Native Forestry Officer, Charlie Bell, on 10 October 2012.

Each of these eight visits and inspections has independently resulted in the same conclusions about the forest. Those conclusions can be summarised as follows.

- (i) The forest is seriously overstocked (some patches are carrying more than 2,500 stems per hectare less than 50cm apart!), and has become 'locked up' with heavily suppressed growth rates. (Many of the small but tall trees (10cm to 20cm dbh) are between 30 and 40 years old.)
- (ii) Ecological diversity is low (and in steady decline, if one compares comments over the seventeen years of visits), and the strong allelopathic effects of the dominant red stringybark means that most potential understorey grass and shrub species don't survive.
- (iii) The already shallow topsoil layer is increasingly vulnerable to erosion as a consequence of the relatively sparse cover of soil-binding understorey species.
- (iv) In its current condition, the forest offers:
 - a. poor ecological benefit (wildlife habitat, biological diversity);
 - b. poor environmental benefit (soil protection and water management);
 - c. poor grazing benefit (and none at all in parts);
 - d. no realistic commercial benefit from sawlogs;
 - e. an elevated bushfire risk (because of the increasingly heavy layer of sticks, branches and leaf litter; and
 - f. an increasingly hazardous environment to be in because of the number of dead branches regularly falling from the couple of dozen very large over-mature trees.
- (v) For there to be any hope of restoring health, vigour, diversity, and ecological and (potential) commercial value to the forest system, a silvicultural thinning intervention to remove around 60+ per cent of the small stems is essential.
- (vi) The result of thinning at that rate would be a forest that:
 - a. is more ecologically vibrant, with more understorey species, more diverse age classes of trees, and more rapid 'recruitment' of trees to provide habitat, feed and nesting for more large and small animals and birds, as well as reptiles and insects;
 - b. provides better soil protection and more opportunity for soil creation;
 - c. produces firewood and round wood products for farm use and for sale (which could offset the cost of thinning and forest improvement), and can be utilised from time to time for livestock grazing, thereby bringing back into play a substantial part of the available land for our pastoral enterprise.

Landholder considerations

The decade and a half of these forestry visits and assessments have coincided with the NSW Government's debates and consultations about private native forestry, which got underway around 1995. For the first decade, the rules about native vegetation and private native forestry were continually 'not settled', particularly for forests such as ours. Further disturbed by a few instances in the late 1990s of neighbours being 'dobbled' for attempting to simply control their choking silver wattle regeneration (which is now taking over some of our own paddocks), we became forever reluctant to tempt fate by commencing the universally recommended thinning operations in our own forest.

In that policy environment relentlessly hostile to private native forestry, we stepped back from bothering to submit any plans to manage and improve our native forest. We know of others on the southern tablelands that had a similar view, including members of Australian Forest Growers and of the Southern Tablelands Farm Forestry Network (which we helped to establish in 1996).

In this context, it would thus be a serious misjudgement by the department to assume that the lack of submissions of forest operations plans under the PNF Code during this period meant there was little or no interest in doing so. **It is our firm (and informed) belief that landholder interest in beneficial management of private native forest on the inland southern tablelands would be rekindled if there was any confidence that the level of management necessary to restore health and vigour to these forests would be possible under the regulations.**

In our particular case, following our study of the Code, supported by the recent visit and advice from the Senior Private Native Forestry Officer, we believe we could apply for a 'minor variation' of the Code to reduce the minimum stand basal area retention to a realistic level (eg, 8m²/ha), which would enable us to thin our forest as universally recommended. We intend to do so.

Policy consideration

From a policy perspective, however, it would make more sense for the PNF Code itself to be amended, so that landholders such as us aren't forced to apply for a 'minor variation' in order to carry out universally recommended silvicultural works.

A simple and workable solution would be for the **minimum stand basal area retention** for 'Tablelands Hardwood' to be divided between:

- (a) the more productive higher rainfall and often more coastal sites; and
- (b) the inland southern tablelands dry sclerophyll forests.

The current minimum stand basal area retention for all 'Tablelands Hardwood' is 12m²/ha. This would appear to be acceptable for most higher rainfall more productive tablelands forests.

However, the less productive drier inland tablelands forests should have a minimum stand basal area retention rate of 8m²/ha — the same as the 'Western Hardwood' forest system, in which red stringybark is also prevalent.

If this simple and scientifically sensible amendment were made to the regulation, more landholders with 'locked-up' depauperate regrowth forests could be persuaded to embark on forest management and improvement programs.

Were this to occur, the benefits would be several: (a) ecological, by providing more multi-layered and biodiverse forest ecosystems that are both vigorous and healthy; (b) economic, by providing intermediate smallwood harvests, and longer-term sustainable large sawlog harvests; and (c) social, by providing the community with these ecological and economic benefits, perhaps enhanced by a revival of local sawmilling enterprises, bringing jobs and skills to regional centres.

END

22 October 2012

Mr Tom Grosskopf
A/g Deputy Chief Executive
Environment and Heritage Policy and Programs
Office of Environment and Heritage

Dear Mr Grosskopf

Adverse effect of the NSW Private Native Forestry Code of Practice

Attached to this covering letter is a submission to you about the perverse negative impact of an important element of the current Private Native Forestry Code of Practice—specifically, the minimum stand basal area requirement for the ‘Tablelands Hardwood’ broad forest type.

Following a visit from your Senior Private Native Forestry Officer, Charlie Bell, on Wednesday 10 October, we’re now informed that our plan to silviculturally thin our forest to greatly improve its ecological service as well as its capacity to be commercially utilised for firewood, grazing and timber production is not possible under the current rules, unless we’re able to secure a ‘minor variation of the Code’. The stand basal area limit for the ‘Tablelands Hardwood’ broad forest type is too restrictive for the drier tableland forest types of southern NSW; in fact, a large proportion of our forest does not exceed the minimal stand basal area in the PNF Code, with the effect that we can remove only a few small trees per hectare in some parts and none at all in most.

The result of our not being able to thin our forest will be a ‘locked-up’ senescent forest of small diameter (10cm to 20cm) stems of red stringybark and scribbly gum (much of it already more than 30 years old), suppressing most grass and understorey species, and providing little in the way of environmental haven for birds and animals or protection from water run-off and soil erosion.

We would be most grateful if this letter and its attachment could be treated as a late submission to the Review of the PNF Code of Practice. If not, then we’d appreciate your giving it your personal attention in any case—given that the minimum basal area setting is directly preventing us from applying the silvicultural thinning regime that has been recommended by several foresters (including from Forests NSW), and by Australian Forest Growers, the Southern Tablelands Farm Forestry Network and the Australian National University.

It is bizarre and nonsensical that the basal area constraint applies only if we intend to make some commercial return from our beneficial silvicultural management. If we want to make reasonable use of the felled trees on the farm (eg, for firewood and construction), the constraint does not apply.

We would be grateful if you gave this letter and attachment your serious consideration. We know you appreciate that inland Southern Tablelands dry sclerophyll forests are NOT the same as higher rainfall forests, both coastal and tableland, and should not be subject to the same stand basal area formula.

We hope to hear from you soon with some encouragement about how we can take this forward to fulfil our good intentions. Such encouragement would also encourage others with similar forests in this district, who would willingly do more to enhance their regrowth forests if they had any hint of not being prevented from doing so (the reason they have not applied to do so for the past decade and an half).

We can be reached at any time at the address above, or by phoning or emailing Alan Cummine on

Sincerely



Alan Cummine & Sylvia Gleeson