

The Landholders Institute Inc

Submission to the Productivity Commission's Native Vegetation Inquiry

Part 1

In Queensland, grazing activities are conducted on woodland plant communities, which account for more than one-third of its grazing lands and these are mainly in the better-watered half of the state. These Woodlands carry 2M beef equivalents in their own right but are currently undergoing a process of woody plant encroachment termed thickening. (Burrows 2002: Burrows et al. 2002) Thickening has been shown, worldwide, to effect the floristic structure of the Woodlands, water and carbon cycles and it can have significant impacts on biodiversity as well. (Franklin 1990, Scanlan and Burrows 1990)

The carbon sink which has developed due to thickening of woody vegetation in the grazed woodlands, has been estimated to account for 25% of the net carbon dioxide emissions for Australia. (Burrows et al. 2002). This huge carbon sink is not presently included in Australia's National Greenhouse Gas Inventory (NGGI) because the Australian Greenhouse Office has assumed that it is not "man induced". Such a position is increasingly untenable as greater understanding of tree-grass relationships in savannas is obtained both in Australia and overseas (eg. see Sharp and Whittaker 2003).

Trees are planted, for example, in the salt prone areas of Western Australia to lower water tables and there are already alarm bells being sounded by some researchers and community members who want to increase overland flows in our streams and rivers. (see Leighton 2003) The extent of woodland thickening in Queensland far exceeds the extent of all forest plantations in Australia. If thickening is not managed because of clearing bans, it will only be a matter of time for deleterious water budget problems to appear similar to the example detailed by Wilcox and Kreuter (2003). Here the authorities in San Antonio, Texas are paying landholders to remove trees to improve water supplies.

Livestock carrying capacities for the grazed woodland areas of Queensland will be reduced to unsustainable levels if legislation removes the ability of landholders to manage their woody regrowth. The nature and implications of tree / grass competitive relationships are given a broad overview in research reported by for example Beale 1973, Scanlan and Burrows 1990 and Burrows 2002. The measured Woody Growth Increment in grazed woodlands by Burrows et al. 2002, is 0.1 meters squared per hectare per year which on the wetter coastal areas, would double the vegetation cover in 60 years and there would be little grass produced well before that time.

Unaddressed woodland thickening imposes a considerable threat to the economic viability of Queensland's grazing industries which utilise 60 Million hectares of woodland communities. It is hoped that the Productivity Commission has carried out a detailed analysis of those thickening impacts for the present inquiry – or, if not, sought such data from the appropriate agencies?

The *Best Management Practice* backed by years of pasture research conducted by The Queensland Department of Primary Industries is highlighted in Burrows (2002). This shows that thinning to scattered trees does not pay based on the improvement in grazing values alone, whereas fully clearing some areas while retaining the same number of trees in 'intact' blocks certainly does.

The Queensland Government has, in recent treatment of the 'tree clearing debate,' created an environment which contributed to 'panic clearing' and then cites the latter as one of its main justifications to introduce clearing bans!

The other alleged justification is that legislation banning clearing will improve Australia's overall net Greenhouse Gas emissions. These figures would be improved enormously if the carbon sink resulting from tree thickening (a man induced process eg. See Burrows et al. 2002, Scholes and Archer 1997, Sharp and Whittaker 2003) was included in our NGGI. Then *common sense* should dictate that some clearing and some (counted) thickening contribute to a balanced result for all concerned! However the statement attributed to Prime Minister Howard (The Australian 30/08/2003) that Australia will not support a carbon trading scheme

means that Landholders will be denied potential trading of carbon credits (from tree thickening) , while still bearing all the negative impacts, such as thickening, have on their production systems. *Where is the fairness and equity in that?*

Part 2

It is a matter of great concern to the Landholders Institute that the Bureau of Resource Science's "State of the Forests Report 2003" has not recognised any addition to the forest estate from vegetation thickening. The total forest estate is reported to be some 7 million hectares more than the 1998 total but, according to BRS, "*This increase does not reflect a real increase in forest cover; improvements in forest mapping have yielded greater accuracy in the estimated area of forest*" (Executive Summary).

This statement is made in an unreported context of some 31 million hectares of status flux, an area five times greater than Tasmania. The NT and WA lost some 12 million hectares reclassified as non-forest while SA, NSW, Qld and Vic gained 18.8 million hectares of former non-forest that is now reclassified as forest.

Reference is made to other data (clearing) that *indicates* that net forest area is declining when that very same data provides very clear evidence that regrowth and thickening is a very significant feature of the landscape. See Landholders Institute Supplementary Submission - "Gee Whiz, We misplaced 5 forests the size of Tasmania".

There are a number of other relevant considerations outlined below that must shape the Commission's understanding of native vegetation issues. They are;

1 Any thickened stand with a density that is greater than that exhibited by that stand prior to settlement is also in excess of any environmental duty of care. The woodland species that have evolved over 40,000 years have flight/fight responses based on the wide tree spacing associated with lower undisturbed basal areas. Closer, post disturbance spacing can pose a serious threat to dependent fauna and avifauna as feral predators have shorter exposed attack distances. Maintenance of this condition is often the very antithesis of a duty of care.

2 The widespread, fully documented, obligation on early settlers to clear land as a condition of title grant, is evidence capable of establishing that all subsequent regrowth falls within the definition of improvements. And under both leasehold and freehold law, these are the exclusive property, for the exclusive enjoyment or disposal of the owner/leaseholder.

3 Even though this has not, yet, been established in an appropriate test case, regrowth and thickening is most certainly a "*relevant consideration*" which must be taken into account if any exercise of power is to avoid falling within the definition of "*inappropriate exercise of power*". This definition is not just some obscure legal remedy but, rather, forms the fundamental basis for informing questions of *best practice* governance.

4 Another aspect of this *relevant consideration* is that the regrowth phenomenon is an existing attribute of most existing lawful uses for grazing purposes. Any measures to control regrowth, provided they are within the scale and intensity of previously demonstrated control measures, could not constitute a *material change of use*. That is, it could not be classed as *development*, requiring consent. (see Maroochy Shire Council v Barns, 2001)

5 Another *relevant consideration* is the fact that uncontrolled regrowth is capable of subordinating a previously dominant use like grazing to former subordinate uses like environmental services for public good. This means that any planning instrument that prohibits control measures under such circumstances is imposing a *material change of use* on the landowner. This would no longer qualify as a *regulation* but, rather, be a *taking* of an interest in land, ie. *a use to which land may lawfully be put*.

6 Such a *taking* would be an *exercise of power for a purpose other than the purpose for which the power was conferred*, an *inappropriate exercise of power* under Sec. 5(2)(c) of the *Administrative Decisions (Judicial Review) Act 1977*. The conferred power is a power to regulate uses, not to acquire them in full or part.

7 The science is very clear that clearing improves catchment water yields. So any improvements in water yield that result from earlier clearing would also appear to be "improvements" for the exclusive possession of the landowner. The Crown would appear to

have a very tenuous claim to this surplus even if the water has entered the community's stream. The fact that the total water allocation by the Crown to downstream users includes a portion of the upstream producer's surplus would not negate the upstream producer's right to enjoy his improvement.

8 Any compulsory action like preventing regrowth control that reduced that water yield would appear to be a *taking* of an interest in land. The Crown would appear to have a liability to both the landowner and any downstream user who may have their "allocation" reduced.

9 To ignore the *relevant consideration* of regrowth's impact on water yield, once the matter has been formally brought to the attention of the relevant authorities, could, given the entirely foreseeable detriment that could result from inaction, constitute negligence.

10 Given that environmental values could also suffer foreseeable detriment from reduced stream flows, official inaction could also constitute a breach of the general environmental duty to take all reasonable and practicable steps to prevent serious environmental harm under Queensland's *Environmental Protection Act 1994*.

We urge the Commission to give these matters the full consideration they deserve. We would welcome the opportunity to appear before the commission to expand on any of these matters.

Yours sincerely

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Part 1 prepared by Dixie Nott

References:

Beale, I.F. (1973) Tree density effects on yields of herbage and tree components in south-west Queensland mulga (*Acacia aneura* F. Muell) scrub. *Tropical Grasslands* 7 135-142.

Burrows, W.H. (2002) Seeing the Woodland for the trees- An individual perspective of Queensland woodland studies (1965-2005) *Tropical Grasslands* (2002) 36,202-217.

Burrows, W.H., Henry, B.K., Hoffman, M.B., Tait, L.J., Anderson, E.R., Menke, N., Carter, J.O., and McKeon, G.M. (2002) *Global Change Biology*. 8 769-784.

Franklin, D.C. (1999). Evidence of disarray amongst granivorous bird assemblages in the savannas of Northern Australia, a region of sparse human settlement. *Biological Conservation* 90, 53-68.

Scanlan, J.C. and Burrows, W.H. (1990) Woody overstorey impact on herbaceous understorey in *Eucalyptus spp.* Communities in Central Queensland. *Aust. Journal of Ecology*, 15 191-197.

Scholes, E.A.S. and Archer, S.R. (1997) Tree-grass interactions in savannas. *Annual Review of Ecology and Systematics* 28, 517-544.

Sharpe, B. Whittaker, R.J. (2003) The Irreversible cattle driven transformation of a seasonally flooded Australian savanna. *Journal of Biogeography* 30 783-802

Van Auken, O.W. (2000) Shrub Invasion of North American semiarid grasslands. *Annual Review of Ecology and Systematics* 31, 197-215.

Leighton, S. (2003) Blue Gums with Interconnecting Wildlife Corridors. *Australian Forest Grower* 26/2, 14-15.

Wilcox, B.P. and Kreuter, U.P. (2003) Woody Plant: Stream flow interactions as a basis for Land Management Decisions in Drylands. In: *Proceedings of the 7th International Rangelands Congress*. Eds. Allsopp, Palmer, Milton, Kirkman, Kerley, Hurt and Brown. South Africa.