

Review of the Natural Resources Commission (NRC) draft report: Active and adaptive cypress management in the Brigalow and Nandewar State Conservation Areas (SCA)

I strongly object to the proposal to use an unsubstantiated claim of a need for ecological thinning to justify commercial logging in some of the most significant conservation reserves in one of the most heavily cleared landscapes on the planet. I disagree and vehemently object to the findings and recommendations contained in the NRC report. The report fails to establish any need for ecological thinning of white cypress pine in any credible scientific manner. Statements such as such as “potentially impacting on environmental values” are not backed up by survey data from across the 57 000 hectares of vegetation earmarked for commercial logging.

The report is based on the observations of timber managers rather than on hard scientific data. Published peer reviewed studies comparing the plant species diversity in forests and woodlands containing white cypress of different densities have found no measurable difference. Instead these studies found that the levels of disturbance from logging and grazing, recent rainfall and landscape features such as:- altitude, soil depth and drainage was a much stronger influent on plant diversity irrespective of the white cypress density (Hunter, 2013), (Thompson Eldridge, 2005). The soil health under dense stands of cypress is better than areas which have been logged and grazed, as there is an increased incidence of bryophytes, mosses and other non-vascular plants, which protect the soils structure and aid in water infiltration and retention. This is extremely important during periods of drought and also rain when underground aquifers are recharging.

In some instances the habitat provided in dense areas of white cypress pine may provide conditions which favour some plant and animals species over others. In these cases a mosaic of different densities at a local landscape level may be desirable. The forests and woodlands of the Brigalow and Nandewar Conservation Areas have been subject to logging for over a century before they were excluded from timber production after the Western Regional Assessment in 2005. There is no evidence that more of the same types of disturbance associated with commercial logging and grazing will improve the environmental values of these forests in the long term.

It is no co-incidence that the four priority areas targeted for the commercial logging trial are the largest Conservation Areas and contain the good stands of mature white cypress. These areas are high in biodiversity and support large populations of threatened woodland fauna and flora.

The Western Regional Assessment undertook five years of scientific study in the Brigalow and Nandewar forests to identify areas of significant environmental value. Permanent protection as Community Conservation Areas was identified as the best management option after extensive consultation with timber operators, conservation groups, Aboriginal stakeholders, minerals and gas industries, local communities and local government.

An industry restructure program of around \$48 million was provided to enable businesses and workers exiting the timber industry. Will this money now be handed back to taxpayers?

Commercial logging will target the larger mature white cypress logs to gain more return on the dollar in trying to reduce the basal area of cypress pine in the target forests. These larger individuals provide important habitat for threatened wildlife and reduce the density of pine seedlings in the immediate area. Removing these larger mature trees will increase pine density not reduce it! Where

is the base line data on the resident wildlife species which justifies removing cypress pine which can be used to show a comparison when monitoring the success or failure of the proposed thinning?

Each of the discrete individual Conservation Areas have unique sets of circumstances which require independent site specific studies to determine the ecological status of vegetation and the best long term management actions. After such studies small areas could be selected and a range of treatments trailed to identify the best long term management based on measurable data not on commercial returns.

#### Values of the Nandewar and Brigalow SCAs

The Pilliga SCAs contain a high proportion of the largest population of the Barking Owl in NSW, a species that has declined drastically elsewhere throughout its range in NSW and the proposal would threaten its nest and roost sites and the maintenance of adequate population levels of its prey species.

The Pilliga SCAs also support populations of the Pilliga Mouse, which is endemic to the area and part of the only viable population of the Black-striped Wallaby in the State. Disturbance from forestry activities and grazing would detrimentally affect these populations through fragmentation of habitat, loss of crucial habitat attributes, creation of barriers to movement and facilitation of access for introduced predators and herbivores, particularly the Red Fox, Feral Pig and Feral Goat.

The north western Pilliga SCAs provide a refuge for the rapidly dwindling Koala population in the Pilliga forests and other Threatened species maintaining remnant populations across this area include the Pale-headed Snake and Eastern Pygmy-possum. Again, these would be adversely affected through loss of foraging and breeding habitat and in some cases predation resulting from the proposal. These species are missing from the smaller forested areas on private land where cypress thinning has been part of the management regime for many years. The subject SCAs were shown during fauna surveys undertaken as part of the Western regional assessment as being of much higher conservation value than the intensively thinned woodlands on private land.

The SCAs overall provide important habitat for a suite of declining woodland bird species and in the cases of the Turquoise Parrot, Black-chinned Honeyeater, Grey-crowned Babbler and Diamond Firetail, probably conserve a significant proportion of their core habitat. Breeding and foraging habitat for these species would be lost as a result of the forestry and grazing activities proposed.

Microchiropteran bat species such as the South-eastern Long-eared Bat and Little Pied Bat would lose foraging habitat and maternity sites, and foraging habitat of the Large-eared Pied Bat and Eastern Cave Bat would also be lost or degraded.

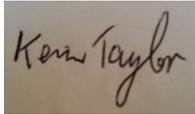
#### Fire

Cypress stands tend to burn cooler and slower as there is less fuel on the ground underneath dense stands of cypress. Many NSW Forest managers leave an uncut dense margin of cypress to protect the adjacent forest from wildfire. It is these stands which many animals such as koalas move into on hot fire prone days.

A carefully implemented mosaic of low intensity prescribed burns applied especially following periods of high rainfall when white cypress pine recruitment is high is an alternative to commercial logging. This should be done according to state fire thresholds adjusted for local species

requirements and conditions where known. A mosaic of different white cypress pine densities has always been present and was noted by the early European explorers. Dense stands can provide cover and heat refugia for plant species such as orchids, and animals such as koalas which have been observed to move into these areas during hot extreme weather.

Kevin Taylor

A small, square image showing a handwritten signature in black ink on a light-colored background. The signature reads "Kevin Taylor" in a cursive, slightly slanted script.

7 August 2014

#### References

Hunter, J. (2013) "Interactions between *Callitris* above ground biomass, species density and plant form in north eastern New South Wales," *Australian Journal of Botany*, 61(1).

Thompson, W. and Eldridge, D. (2005) "Plant cover and composition in relation to density of *Callitris glaucophylla* (white cypress pine) along a rainfall gradient in eastern Australia," *Australian Journal of Botany*, 53.