

Styx River State Forest Audit – May 2012

At the end of April, the Clarence Environment Centre joined with members of the North East Forest Alliance to undertake an audit of logging operations in the Styx River State Forest southwest of Dorrigo in northern NSW.

We have already reported on this web site the issues surrounding the deletion of threatened Rufous Scrub-bird records from Forests NSW's threatened species data base, which allowed them to log at least an additional 25 hectares of land, much of which contained typical habitat for the birds.

As we understand it, there is a NSW Wildlife Atlas record of the threatened Rufous Scrub-bird occurring in, or adjacent to, Compartment 502 of Styx River State Forest, that predates those recorded during the mid March 2007 pre-logging survey by Forests NSW's staff.

There is also modelled habitat for the Scrub-bird appearing in the official mapping of compartment 502, and that habitat has been confirmed by three ecologists acting for local environment groups, and has now, finally, been confirmed by Environment Protection Authority (EPA) investigators. However, the extent of habitat, which was subjected to pre-logging burning is restricted by the ridiculous Threatened Species Licence prescription that states modelled habitat must exceed one hectare.

Forests NSW claims it deleted its Rufous Scrub-bird records because there was no modelled habitat, which has now been proved wrong, and secondly because the officer instructed to undertake the "Pre-logging and pre-roading Flora and Fauna Survey Report", was unqualified.

We point to Forests NSW's Threatened Species Licence which spells out the required "**Surveyor experience**"

- a) SFNSW must ensure that persons conducting pre-logging and pre-roading surveys are suitably experienced and trained. Suitable experience and training includes, but is not limited to:**
- i. Extensive experience with flora and / or fauna survey work.*
 - ii. Extensive experience in the field identification of flora and / or fauna. **Surveyors must be able to identify the threatened species and habitats of threatened species relevant to the region that require species-specific or site-specific conditions, as well as similar species that may be confused with these. Surveyors must be able to identify features referred to in condition 8.7.2 (b).***
 - iii. Familiarisation with herbarium or museum specimens of threatened species requiring species-specific or site-specific conditions, if not already familiar.*
 - iv. Relevant tertiary qualifications are preferable but not essential if the above criteria, condition 8.3(a) i., ii. and iii. are met.*

Forests NSW also claims its surveying officer had observed one Scrub-bird following him through the bush (above ground), something that is not accepted Rufous Scrub-bird behaviour, which gave them further justification for deleting the records, while ignoring the mapped modelled habitat. However, I understand the officer's records, entered on the NSW Wildlife Atlas, were all "call detections", none were visual, which casts doubt on the veracity of Forests NSW's claim of a following bird.

It seems that, not only was the surveying officer unqualified, but it now appears that the officer who subsequently claimed there was no modelled habitat present was also either inadequately qualified or incompetent.

This raises the following questions:

- **Why is Forests NSW using inadequately trained staff to undertake ecological surveys?**
- **Can Forests NSW delete threatened species' records without consultation with the Office of Environment and Heritage (OEH)? And,**
- **Given the old Rufous Scrub-bird record, the disputed records, and the belief of two of our three independent ecologists that they heard a Scrub-bird call when assessing the site (poor conditions, so not 100% certain), why has OEH not stopped logging pending a full targeted search for Scrub-birds being undertaken?**

Habitat and Recruitment Trees

Scrub-birds were not the only major issue raised by the audit. Because Powerful Owl and more than 1 Greater Glider per Hectare have been recorded, Condition 6.9 d of the Threatened Species Licence is triggered, meaning 8 hollow-bearing trees must be retained per hectare of net harvest area.

According to the Harvest Plan, Compartment 502 contains 178 hectares of net harvest area, which means a total of 1,404 marked hollow bearing trees, 890 marked recruitment habitat trees, and 890 stags (standing dead trees), should be retained where available.

It was very clear from our visual assessment that the logged areas overall fell far short of the required numbers of all 3 categories, even counting unmarked hollow-bearing trees which accounted for at least half of the total, and many that were marked with “H” were little more than saplings, measuring about 40cm diameter at breast height.



These marked habitat trees measure less than 40cm diameter, and will need another 100 years to develop hollows. This would be allowable: *“Where this density is not available, the existing hollow-bearing trees must be retained plus additional trees must be retained to meet the requirement of ten per two hectares.*”

The Licence's definition of “Hollow-bearing tree” is “*a tree where the base, trunk or limbs contain hollows, holes and cavities that have formed as a result of decay, injury or other damage*”. Also they “*must be selected from the trees with the largest dbhob* (diameter at breast height)”.

Clearly that has not happened at Styx State Forest. The trees pictured above were just 2 of several marked near where an incredible six old-growth trees, all at least three times larger than those pictured above, had been unceremoniously bulldozed out of the ground, creating a huge 70m square gash in the landscape for a log dump (see just 2 examples below).



Hollow-bearing tree destruction for OH&S purposes

What we found to be absolutely unacceptable was the widespread destruction of large, old-growth, hollow-bearing trees, not only for log dump construction, but supposedly for Occupational Health and Safety reasons along both the Styx River Forest Way and an internal logging trail. In both cases we measured trees that had been cut down over 40 metres from the road, and in areas that were not to be logged. The majority of trees still had solid trunks and posed no immediate danger to traffic or logging operators, yet well over 100 of these old trees have been cut down or pushed over by machinery.



We understand that Forests NSW has already been taken to task over the incident by a local National Parks ranger, but we are told the damage was on a designated Forest road reserve so no action would be taken by National Parks.

Many of the old-growth trees were standing on the 50m buffer along the National Park side of Styx River Forest Way which is a tourist route and, according to the harvest plan, that buffer is exempted from logging to provide “visual protection” for the adjoining Park.

These relatively sound trees, posing no danger to anyone, were both over 40 metres from Cpt 502 Trail





The above are just two of the 50 or more old trees that were cut down or pushed over along the roadside adjacent to the National Park. Three trees in one clump were again measured more than 40m from the road verge, and could not have posed any danger to anyone.



We also identified inappropriate selection of recruitment trees. The scanty crown of the tree pictured at left, a case in point. The Threatened Species Licence spells out the requirements as follows: *“Recruitment trees exhibit the following structural characteristics: Good crown development; minimal butt damage; tree not suppressed. Suppressed trees are those whose growth has been significantly inhibited by surrounding trees or overstorey.”*

Certainly the pictured crown is clearly suppressed, and its development could never be described as good. However, to compound this poor selection, take a look at ground level in the picture below.

The entire root system has been removed on one side to construct the trail yet, presumably expressing some warped sense of humour, the forester has painted an “R” on the trunk. We feel this is a clear indication of the overall attitude of forestry workers towards protecting the biodiversity of these highland forests.



None of the immature trees marked with “H” and “R” have been recorded, and will almost certainly be logged during the next logging cycle.

The Styx River State Forest operation is industrial logging at its worst.



We have forwarded a list of identified breaches to the EPA's Crown Forests Division for investigation, but we are not holding our breath for a result. We are still awaiting a response to three reports of logging breaches in Wedding Bells and Clouds Creek State Forests, the first dating back to July last year.

We are also awaiting information on a recommended rehabilitation program for the illegally logged endangered Lowland Rainforest community at Grange State Forest, and news of the Doubleduke State Forest prosecution, where we allege another endangered ecological community was illegally logged, that was supposed to have gone to the Land and Environment Court in February this year.

Full stories of the Grange and Doubleduke logging cases can be found on this web site.

Below, for those interested, we have attached details of our alleged breaches at Styx River, and the relevant Threatened Species Licence clauses.

In Summary, we believe the following breaches of Section 5.6 (see below) have occurred:

- 1. Section 5.6.a) ii - “Retained, hollow-bearing trees must be selected from the trees with the largest dbhob and must be live trees and should have good crown development and minimal butt damage”.**
- 2. Section 5.6.a) i - “A minimum of ten hollow-bearing trees must be retained per two hectares of net logging area. Where this density is not available, the existing hollow-bearing trees must be retained plus additional trees must be retained to meet the requirement of ten per two hectares. The additional trees retained must be those with the largest dbhob” (particularly given that many marked “H” trees do not have hollows, while more than a hundred old-growth trees have been cut down or bulldozed).**
- 3. Section 5.6.g) iii - “Retained trees referred to in conditions 5.6 (a) i. ... of this licence must be marked for retention” (including in steep unloggable areas which should have been mapped as exclusion zone).**
- 4. Section 5.6.b) i - “A minimum of ten recruitment trees must be retained per two hectares of net logging area”**
- 5. Section 5.6.b) ii - “Retained recruitment trees must show potential for developing into hollow-bearing trees. Retained recruitment trees must have good crown development and should have minimal butt damage and should not be suppressed. Mature and late mature trees must be retained as recruitment trees where they are available”.**
- 6. Section 5.6.g) iii - “Retained trees referred to in conditions 5.6 (b) i. ... of this licence must be marked for retention”**
- 7. In relation to Harvest Plan requirement under “Buffer” (page 3) which states: “A buffer of 100m wide will be implemented along Styx River Forest Way. Only quota logs to be removed from this area.” There is no visible difference between the logging along that 100m wide buffer and the logging elsewhere in of the compartment (this is an area that should have been protected under the Rufous Scrub-bird prescription, had the records not been deleted).**
- 8. Section 5.6.f) iii “At least six eucalypt feed trees must be retained in every two hectares of net logging area where they occur. Where a retained eucalypt feed tree also meets the requirements of a hollow-bearing or recruitment tree, the eucalypt feed tree can be counted as a hollow-bearing or recruitment tree”. Note: No trees have been marked “E”. However, the OEH might excuse this on the basis that if a tree is marked with an “H” or “R”, then there does not need to be an “E” marked as well.**
- 9. An unofficial walking trail exists through the compartment constructed by the New England Eco Tourism Society Incorporated, marked by star pickets with orange plastic tops which were apparently government funded. The Harvest Plan identifies this fact (page 3) stating: “Care should be taken not to damage any steel posts capped with reflective orange sleeves. The SFO must ensure that any posts removed during harvest are replace in the same location immediately following harvest”. Not only were posts observed lying on the ground after harvest, but the reflective sleeves on others had been burned by the pre-harvest burn three months earlier and had not been replaced.**
- 10. We believe the widespread destruction of hollow-bearing trees along the southern side of Styx River Forest Way does not constitute a specified forestry activity. The claim this destruction was undertaken for OH&S reasons cannot be supported when some trees were measured further than 40m from the road verge in an area protected from logging for Visual Amenity. We also believe this precedence, if carried to the extreme, would have seen all hollow-bearing trees along the entire NSW road network cut down.**

The destruction of hollow-bearing trees is a Key Threatening Process under the TSC Act, and as the destruction detailed above was not a specified forestry activity, it is illegal under the TSC Act/Native Veg Act.

Licence Conditions

5.6 Tree Retention

The following condition must be applied within the non-regrowth zone:

a) Non-regrowth Zone Hollow-bearing Tree Retention

- i. A minimum of ten hollow-bearing trees must be retained per two hectares of net logging area. Where this density is not available, the existing hollow-bearing trees must be retained plus **additional trees must be retained to meet the requirement of ten per two hectares. The additional trees** retained must be those with the largest dbhob.
- ii. Retained, hollow-bearing trees must be selected from the trees with the largest dbhob and must be live trees and should have good crown development and minimal butt damage.
- iii. Retained hollow-bearing trees must represent the range of hollow-bearing species that occur in the area. Preference should be given to selecting those species or trees which are most suitable for the threatened species known or likely to occur in the area.
- iv. Trees retained outside the net logging area must not be counted as hollow-bearing trees. Stags must not be counted as hollow-bearing trees.
- v. Hollow-bearing trees must be scattered throughout the net logging area, except where compliance with condition 5.6 (a) ii. above prevents such retention.

b) Non-regrowth Zone Recruitment Tree Retention

- i. A minimum of ten recruitment trees must be retained per two hectares of net logging area.
- ii. Retained recruitment trees must show potential for developing into hollow-bearing trees. Retained recruitment trees must have good crown development and should have minimal butt damage and should not be suppressed. Mature and late mature trees must be retained as recruitment trees where they are available.
- iii. Retained recruitment trees must represent the range of species in the mature and late mature growth stages that occur in the area. Preference should be given to selecting those species or trees which are most suitable for the threatened species known or likely to occur in the area.
- iv. Trees retained outside the net logging area must not be counted as recruitment trees.
- v. Recruitment trees must be scattered throughout the net logging area, except where compliance with condition 5.6 (b) ii. above prevents such retention..

g) Protection of retained trees

- i. When conducting specified forestry activities and post-logging burning, damage to trees retained under conditions 5.6 (a), 5.6 (b), 5.6 (c), 5.6 (d), 5.6 (e) and 5.6 (f) of this licence must be minimised to the greatest extent practicable. During harvesting operations, the potential for damage to these trees must be minimised by utilising techniques of directional felling.
- ii. In the course of conducting specified forestry activities, logging debris must not, to the greatest extent practicable, be allowed to accumulate within five metres of a retained hollow-bearing tree, recruitment tree, stag, *Allocasuarina* with more than 30 crushed cones beneath, eucalypt feed tree, or Yellow-bellied Glider or Squirrel Glider sap feed tree. Logging debris within a five metres radius of retained trees must be removed or flattened to a height of less than one metre. Disturbance to ground and understorey must be minimised to the greatest extent practicable within this five metres radius. Habitat and recruitment trees must not be used as bumper trees during harvesting operations.
- iii. Retained trees referred to in conditions 5.6 (a) i., 5.6 (b) i., 5.6 (c) i., 5.6 (d) i., 5.6 (e) i., 5.6 (f) i., 5.6 (f) iii. and 5.6 (f) iv. of this licence must be marked for retention. The only exception to the marking of the retained trees can occur where the understorey consists of thick impenetrable lantana greater than one metre high or other impenetrable understorey. SFNSW must clearly document and justify such situations in harvest planning documentation either during pre-planning or as it becomes apparent during compartment mark-up.

Compiled by John Edwards
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