



## Doing Surveys

### NEFA BACKGROUND PAPER

#### Doing Surveys

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Under the TSL pre-logging surveys and inspections are required to identify the presence or absence of a range of threatened species for which prescriptions are required. If the species or features are not recorded then the prescription is not applied. The current Threatened Species Licence recognises that:

*An integral part of the licence is the requirement for SFNSW to conduct operational and pre-logging and pre-roading surveys to assess presence of species requiring species-specific or site-specific conditions.*

It is evident that many species are missing out on the protection they need because adequate surveys are not being undertaken.

The EPA's (2014) claimed aim is to get rid of most species specific prescriptions for threatened species and focus on a landscape based approach to reduce *"the need to locate threatened species through costly surveys"*, though this is likely to be very different from the landscape protections currently applied for most species.

#### Pre-logging Flora and Fauna Surveys

As part of the harvest plan preparation the Threatened Species Licence now requires *Pre-logging and Pre-roading Flora and Fauna Surveys* to be conducted by suitably experienced and trained persons, with minimum survey requirements explicitly identified. Targeted fauna

surveys are required within compartments that contain known or potential habitat for those fauna species that require site-specific or species-specific conditions. They are not required if there has been a reliable survey in the vicinity in the previous decade. For the Upper North East NSW there are 38 fauna species identified as requiring targeted surveys. For 21 of these species, rather than surveying the Forestry Corporation can opt to assume they are present and apply the required prescriptions to the whole compartment. The Forestry Corporation would usually rather undertake the survey because in the unlikely event that they find the species they will only have to apply the prescription to a limited area.

As well as the species specific surveys, the Forestry Corporation is required to traverse 4km of every 200 hectares of the logging area, during which they are required to spend six person hours surveying for threatened plants and four person hours looking for scats, feed trees, dens and nests of specified threatened fauna. The Forestry Corporation primarily rely upon their own staff to undertake pre-logging flora and fauna surveys using prescribed methods over broad areas before harvesting plans are prepared.

It is apparent that the Forestry Corporation does not have the required expertise or intent to undertake their required *Pre-logging and Pre-roading Flora and Fauna Surveys*. They do generate many records of some of the easiest to find species, though have poor results for some of the more cryptic species. NEFA regularly locate threatened species in areas being logged where they were not identified by the Forestry Corporation. There are significant issues with the competence of their surveys.

For example in their 2007 pre-logging flora and fauna survey in compartment 502 of Styx River State Forest the Forestry Corporation recorded the vulnerable Rufous Scrub-bird (*Atrichornis rufescens*) at 7 sites. These records were made by playing tapes of their calls and hearing them respond. The Rufous Scrub-bird is a small secretive understorey bird of highland wet forests in north-east NSW. It is a living fossil with a lineage dating back 97 to 65 million years but is now listed as vulnerable to extinction, with burning and logging recognised as primary threats. It has long been considered to be in decline on the New England Tableland. The Threatened Species Licence requires that for the Rufous Scrub-bird, all microhabitat within modelled habitat and within 300m of a record, plus a 20m buffer, is to be excluded from logging.

When planning logging operations in Compartment 502 of Styx River SF Forestry Corporation decided to ignore their own records of the Rufous Scrub-bird, certifying in their March 2011 flora and fauna survey report that records of the Rufous Scrub-bird made by their own trained fauna surveyor, which were recorded in their own databases and NPWS's Wildlife Atlas, did not exist. It wasn't until over three months later that they questioned the surveyor and undertook site investigations to attempt to justify that the records they had ignored were invalid and that no suitable habitat existed in the area. They made no subsequent attempt to have the area resurveyed by a competent person with the required expertise.

In early 2012 the Forestry Corporation burnt much of the area and started logging. When a complaint was made by Joe Sparkes to the EPA in March 2012, the EPA undertook a preliminary assessment which failed to identify any problems. Conservation groups then had to engage qualified experts to undertake two separate habitat assessments, and complain to the responsible Ministers (Pugh 2012 a, b, c, d), before the EPA engaged a

suitable expert in May who also verified the presence of qualifying Rufous Scrub Bird microhabitat – contrary to the Forestry Corporation’s claims. Being the wrong time of year, surveys for any birds that had survived the burning and logging were not able to be undertaken.

The EPA’s March inspection was obviously incompetent and it took two expert assessments by conservation groups to force them to engage their own expert two months after the first complaint was made. Logging continued over this time. Even though their own expert verified the presence of Rufous Scrub Bird microhabitat (as defined in the TSL), the EPA protected three remaining areas of qualifying habitat, though allowed an area assessed as potential habitat, and other uninspected areas, to continue to be logged.

The EPA (2013) refused to take any regulatory action, though in response to the Forestry Corporation’s claims that their surveyor was a field worker with no formal qualifications, who had done their Forestry Wildlife Training, and thus was not adequately trained and thus had misidentified the birds, wrote to the Forestry Corporation:

*The EPA further acknowledges that the records were allegedly misidentified by a surveyor who at the time of the survey was not appropriately trained or with inadequate experience to undertake these surveys. ... the EPA is concerned about the extent and potential error associated with the previous surveys conducted by [the forester] in the region. The EPA notes that the original surveys for Styx River State Forest were undertaken in January 2007, with the surveyor continuing to undertake ecological surveys until July 2011, allowing for a period of five years in which diurnal bird surveys may not have been undertaken adequately.*

It needs to be recognised that this inadequately trained surveyor (who supposedly mis-identified a response to a taped call he just played on numerous occasions) was responsible for surveying for all animal groups and plants across many forests for many years.

Despite four ecologists with expertise in identifying Rufous Scrub Bird habitat (including one engaged by the EPA) agreeing that qualifying microhabitat existed in the area, the EPA (2013) allowed the Forestry Corporation to get away with ignoring their own records on the basis that subsequent inspections by the Forestry Corporation ecologists had claimed that the habitat did not satisfy the explicit criteria for suitable microhabitat specified in the licence. The EPA did raise concerns that:

*The EPA has noted that none of the July 2011 habitat assessments were conducted in the highest quality habitat, despite the presence of 8 hectares in the compartment.*

...

*The EPA notes that all but one of the July 2011 assessment were undertaken adjacent to Styx River Forest Way, a site characterised by a high level of clearing, disturbance, structural openness and which runs along the ridge line. The EPA notes that the on ground highest quality habitat tends to be within the wetter environments, in gullies, in close proximity to rainforest and way from sites which are characterised by disturbance....*

*...the EPA considers that Forests NSW failed to target areas of greatest suitability for microhabitat assessments. Accordingly the EPA considers that Forests NSW failed to meet the licence intent of the habitat surveys condition thus increased the risk of failing “to protect the habitat of threatened species”.*

The EPA ignored the fact that even with this rorting of the intent of the licence, the Forestry Corporation had claimed qualifying microhabitat did not exist in areas where the experts did identify it. The EPA also refused to consider NEFA's complaint that at the time the Forestry Corporation signed a document that falsely certified that the records did not exist they were yet to do their shoddy habitat assessments and justify why they considered the records erroneous.

## Mark Up Surveys

Many survey requirements are not triggered until logging, where the Forest Corporation is required to undertake *Mark Up Surveys* ahead of logging. Under the TSL Harvesting Operations are prohibited in areas which have not been subject to compartment mark up surveys. At this time *"an adequately trained person must conduct a thorough search for, record and appropriately mark ... threatened and protected species features"*.

These features include hollow-bearing and recruitment trees, feed trees, nests, roosts and dens of a variety of hollow-dependent species, Koala high use areas, latrine and den sites of the Spotted-tailed Quoll, Glossy-black Cockatoo feed trees, Yellow-bellied Glider and Squirrel Glider sap feed trees, bat tree roosts, Swift Parrot and Regent Honeyeater feed or nest trees, wombat burrows, soaks and seepages in *Phyloria* spp. habitat, and threatened flora. This is a key step in providing the intended protection to a range of threatened species. It is only by undertaking the required on-ground assessment that the features can be found that that trigger a variety of prescriptions

As noted by the EPA *"The licence has numerous environmental features which are to be searched for during compartment mark up and with no compartment mark up effort there is significant risk to these environmental features. Furthermore, this provision has been designed to ensure that any species not located during ecological surveying are captured during or shortly before the time of harvesting operations"*.

The foresters usually don't have adequate expertise to recognize such features, and at best they are a secondary consideration to the quest for sawlogs. There is a distinct lack of will to undertake the required assessments to trigger the prescriptions. This is exemplified by their ongoing refusal to undertake adequate searches for Koala scats.(see also **Protecting Habitat Trees**).

The triggering of Koala protection is dependent upon Koala Mark Up Searches to find sufficient Koala scats (faecal pellets) to identify Koala "high use" and "intermediate use" areas. If there is no mark up surveys then there is no protection for Koalas. The TSL requires the Forestry Corporation to thoroughly search trees for Koala scats, at 10m intervals, at least 300m ahead of logging, in suitable habitat. Given the frequent failure to undertake mark-up surveys found in our audits it is apparent that no attempt is being made to minimise impacts on Koalas in many logging operations.

At Royal Camp State Forest NEFA (Pugh 2012e) found logging of Koala High Use Areas were occurring due to a failure of Forestry Corporation to search for Koala scats ahead of logging, with one Koala High Use Area actively being logged and four others proposed for logging. The forest had an open understorey, though there was leaf litter and bark under most trees and dense grass in places – it was easy to tell whether trees had been searched.

The EPA found that the searching for Koala scats had not been adequate, and that 61 trees had been logged and 405m of snig tracks constructed in the koala high use exclusion zone that should have been imposed. (Pugh 2014c).

While logging was stopped in one area while the EPA investigated some of our complaints, NEFA found that in the area where logging was allowed to continue the Forestry Corporation failed to search for Koala scats and continued to log Koala High Use Areas, with 2 more being found by NEFA after logging. The EPA investigated one of these, finding that adequate searches were still not being undertaken and 7 trees were logged and 230m of snig tracks constructed within another Koala High Use Area.(Pugh 2014c).

The EPA's (2013b) belated report states:

*In summary, the EPA's investigation determined that FCNSW had not adequately implemented koala protection prescriptions in parts of its operations, particularly around log dump 20 in compartment 15. The EPA identified that compartment mark up and searching was not conducted in adherence with the TSL in this area. The EPA also identified that timber harvesting had been conducted within areas considered to be koala high use.*

*The EPA considered that these breaches were significant and could have been prevented. As noted above the EPA issued FCNSW three penalty notices in relation to these matters.*

The Forestry Corporation maintained they had done nothing wrong throughout the EPA's investigations, refusing the EPA's requests to undertake more thorough surveys for Koala scats. When the fines were announced the Forestry Corporation described the offences as "administrative, and akin to staying too long in a parking lot". (Pugh 2014c).

In 2013 the Forestry Corporation announced they were going to resume logging in another part of Royal Camp based on a plan that had found no Koalas. A NEFA inspection (Pugh 2013) found extensive Koala High Use Areas. The EPA commissioned their own survey that found the resident Koala population in Royal Camp is significant due to the region's Koalas being in significant decline and possibly endangered (Pugh 2014c).

The Forestry Corporation argued that they had been applying the same superficial scat searches since the TSL was implemented and thus there is no need to change it. Despite it now being obvious that their superficial searches were not adequate to detect Koala High Use Areas and satisfy the intent of the TSL, the Forestry Corporation still refused to do the required thorough searches (Pugh 2014c).

As part of their Mark Up Surveys the Forestry Corporation are required to identify, retain and mark Yellow-bellied Glider sap-feed trees, along with 15 trees suitable for foraging in their vicinity. Sap-feed trees are those chosen by Yellow-bellied Gliders to tap for sap by chewing, often V shaped, channels into the bark to concentrate sap for feeding. Only very specific trees are chosen.

The first prosecution of Forests NSW by the NPWS in the mid 1990s was for cutting down a Yellow-bellied Glider sap feed- tree on the Richmond Range, and Forests NSW were then fined \$2,000.

At Yabbra SF (Pugh 2009) NEFA found over a dozen Yellow-bellied Glider sap-feed trees that had survived the logging, with not one of them identified by the Forestry Corporation and (because of burning) no way of estimating how many had been logged. The EPA's response (19 May 2010 ) was simply "*DECCW has issued Forests NSW a penalty notice in regard to the failure to mark Yellow-bellied Glider Sap feed trees and feed trees*".

The EPA refused our repeated requests to investigate two Yellow-bellied glider sap-feed trees that went unidentified in logging at Doubleduke SF (ie Pugh 2010), despite being shown one of them and auditing the area. It took until 2013 to get them to admit the offence, stating "*1 TSL breach Condition 6.17(g)v. EPA officers identified a YBG feed tree within NEFA's sample area, FCNSW had not marked 15 suitable feed trees within a 100m radius. EPA Action: The EPA assessed that the scale harm in this instance was minor and did not warrant enforcement action.*

At Wedding Bells (Pugh 2011) the EPA did at least issue a warning to Forestry Corporation for not properly marking a Yellow-bellied Glider sap-feed tree, damaging it by dropping trees on it and leaving debris around its base. This tree had not been identified and protected in the Mark Up Survey despite the Forestry Corporation's own fauna surveyors identifying it by a "YBG" and arrow pointing to it sprayed onto a tree alongside the track. The response by the EPA to NEFA was to make the "*marking and protection of yellow-bellied glider sap feed trees as one of its priorities*".

Soon after at Royal Camp State Forest NEFA (Pugh 2012e) also found a distinctive Yellow-bellied Glider sap-feed tree logged that should have been identified in the compartment mark-up. In company with a fauna expert, NEFA took the EPA to the tree head left on the ground and showed them the obvious V notches, where even the teeth marks could be seen, yet EPA later claimed they "*could not determine beyond reasonable doubt whether the incisions had been made by a yellow bellied glider*". In response to our complaint that the EPA ignored evidence shown to them, they replied that they now accepted the evidence though because of "*prioritisation, a regulatory decision was made not to issue a penalty notice*". They never raised it with the Forestry Corporation. (Pugh 2014c).

Given the importance of sap-feed trees for Yellow-bellied Gliders it is alarming that the requirement to identify and protect sap feed trees is being regularly ignored by both the Forestry Corporation and the EPA.

The Forestry Corporation's Threatened Species Licence (5.2.1b) requires them to identify and appropriately protect locations around an array of threatened plant species. Except where there are pre-existing records, protection depends upon threatened species being searched for and located at the time of compartment mark-up.

In a single inspection of Doubleduke SF a botanist employed by the North Coast Environment Council (see Benwell 2010, Pugh 2010b) found "*The endangered species *Lindsaea incisa* (a small ground fern) was identified at a site that appeared to be within the harvestable area of cpt 145*" and in compartment 144 he found the threatened grass *Paspalidium grandispiculatum* "*amongst earth on an upturned stump at the edge of the recently constructed or upgraded access track, so would appear to have been directly damaged during track construction*".

NEFA subsequently found large numbers of *Lindsaea incisa* (within a wetland and its buffer that had been illegally logged) in Doubleduke SF from within which trees had been logged and machinery driven through it, despite the requirement being for a 50m exclusion zone to be established.

For Doubleduke, Benwell (2010) considered “*No pre-logging flora surveys or flora assessments that could have detected this species appear to have been carried out by FNSW*”. After roading and logging resumed in compartment 144 NEFA was informed that a foreman had been trained (by showing him a picture) to identify the cryptic *Paspalidium grandispiculatum*. It is evident that most foresters do not have the required skills to identify most threatened plants.

The most recent example of the Forestry Corporation’s unwillingness to protect threatened plants and Koalas was on private property at Whian Whian. The operation was undertaken by the same Forestry Corporation staff who manage public land logging in the region. NEFA’s (Pugh 2014) audit located 8 Koala high use trees, 10 endangered Slender Marsdenia, 30 vulnerable Arrow-head Vines, and 36 vulnerable Red Bopple Nuts on the property that were affected by forestry operations occurring within 20 metres of them. The Private Native Forestry Code of Practice for Northern NSW (PNF Code) requires the implementation and marking of 20m buffers around each of these species, though has no requirement to look for them.

NEFA wrote to the EPA on the 22 September 2013 to request the immediate and urgent imposition of a Stop Work Order in accordance with Section 37 of the Native Vegetation Act 2003 to stop the Forestry Corporation’s ongoing unlawful logging operations on private property at Whian Whian (adjacent to Nightcap National Park), after a survey found a road marked for construction through what should have been exclusion zones for 8 Koala high use trees, over 60 Red Bopple Nut *Hicksbeachia pinnatifolia*, and 3 Slender Marsdenia *Marsdenia longiloba*.

The EPA sent a team in to help the Forestry Corporation, though refused to stop work. Three days after our request the track was constructed within what should have been 20m exclusion zones for 3 Koala high use trees, 7 endangered Slender Marsdenia, 12 vulnerable Arrow-head Vines, and 8 vulnerable Red Bopple Nuts, most of which had been identified and tagged with pink tape (by either NEFA or the Forestry Corporation) prior to track construction. Two Slender Marsdenia were killed, one injured and 3 are missing. One Arrow-head Vine has since died. The fact that these breaches of the threatened species provisions of the PNF Code were knowingly committed by the Forestry Corporation, and under the supervision of the EPA after they had refused NEFA’s request for a Stop Work Order, is reprehensible.

NEFA also found 4 other threatened fauna species, and the community another endangered and another vulnerable plant species, requiring prescriptions within the area proposed for logging. None of these were found by the Forestry Corporation. This example proves that the Forestry Corporation have total contempt for threatened species and will not willingly protect them.

The above examples are only a few of those we have found in our inspections of a very small sample of logging operations. NEFA have reported numerous other instances where the Forestry Corporation has not complied with the species-specific requirements of the TSL.

More generally, NEFA has often found the Forestry Corporation logging in areas without doing the required mark-up surveys. If there is no mark up surveys then there is no protection for Koalas, key fauna features or threatened plants. In response to our complaints about the failure to do the required surveys and protect the required features in Yabbra SF (Pugh 2009) and Girard SF (Pugh 2010d) the EPA claimed that the surveys were not necessary because of the “*thick impenetrable vegetation*” which meant “*Forests NSW is not required to mark up the harvest area (including in advance of the operation in preferred koala habitat) due to occupational health and safety considerations*”. While NEFA accepts that some parts had impenetrable understories (mostly of lantana resulting from past logging), most of the areas not marked up did not have impenetrable understories.

At Doubleduke SF the EPA issued the Forestry Corporation a caution for failing to adequately mark up an area prior to logging, this was after we had written to the ministers and issued a media release calling for the logging to be stopped.

Eventually the EPA decided to check for themselves, noting on their website:

*In June 2012, the EPA instigated a campaign to check Forestry Corporation of NSW compliance with mark-up requirements. The campaign clustered a number of audits over a week on north coast NSW forests from Sydney to the Queensland border.*

*The EPA identified that in some areas, mark-up complied with licence requirements, and in other areas the EPA identified the need for improvements. In some areas, marking had not been performed ahead of operations, or was incomplete.*

It is evident that there has been an ongoing failure on behalf of the Forestry Corporation to undertake adequate Mark Up Surveys on a routine basis. This means that mitigation measures identified as necessary for an array of threatened species are routinely not being applied.

### **Threatened Species**

### **Protecting Habitat Trees**

### **Protecting Threatened Fish**

### **Protecting Exclusion Areas**

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