

## Regional Forest Agreements have failed to protect the environment

Logging of native forests on public land is permitted under 20-year agreements between the state and federal governments called Regional Forest Agreements (RFAs). There are three RFAs in NSW, North East, Eden and Southern, and they expire between 2019 and 2021. The RFAs have several aims relevant to the environment, including:

1. [Providing] for the ecologically sustainable management (ESFM) and use of forested areas in the regions;
2. [Having] regard to studies and projects carried out in relation to environmental values, including old-growth, wilderness, endangered species, National Estate values and World Heritage values.

### Australia's forests: too precious to log

Habitat loss and degradation have been identified as one of the major conservation policy issues for Oceania<sup>1</sup>. In Australia, approximately 50% of woodland and forest ecosystems have been destroyed, and 70% of remaining forests are degraded by logging. Resource extraction via logging is recognised as a driver of environmental change<sup>2</sup>. As a result, some of Australia's most high profile scientists have called for policy shifts that stop logging via education, incentives and compensation<sup>1</sup>.

In 2011 'The Forests of East Australia,' which covers the entire North East RFA region and part of the Southern RFA region, were listed as the world's 35<sup>th</sup> biodiversity hotspot<sup>3</sup>. The Southwest Forest RFA Region of Western Australia is also entirely contained within the Biodiversity Hotspot Southwest Australia. Hotspots are defined as having an exceptional concentration of endemic (not found anywhere else) species and being highly threatened<sup>4</sup>. **Australia's forests are amazing and internationally important!**

Forestry practices destroy and modify forest landscapes and forest heterogeneity, prevent or impede ecological processes, kill animals (therefore modifying populations and assemblages of species), modify habitat and have implications for the evolutionary potential of forest species<sup>5</sup>. Industrial logging is not appropriate in areas of such extraordinary biodiversity value and reflects poorly on Australia, which itself is one of the most significant countries in the world for nature. In 2015, WWF identified Australia as being the only developed nation to have a deforestation front, and logging was identified as a driver of this deforestation in NSW<sup>6</sup>. **Don't believe the spin: native forest logging is not sustainable.**

### What forest values and ecological processes does logging impact?

#### 1. Loss of tree hollows

Although eucalypt forest covers only 8.3% of Australia, it supports 47% of all hollow-using vertebrates. Hence there is a strong concentration of hollow-using species in forests<sup>7</sup>. Many of these species are iconic and found nowhere else on earth including the brush-tailed phascogale; yellow-bellied glider; greater glider; squirrel glider and Leadbeater's possum. The loss of hollows via logging has been identified as a threat to all of these species<sup>8</sup>.

A minimum of 120 years is required for hollow formation in most eucalypt species and much longer for many<sup>7</sup>. Logging shifts the age-class distribution of trees from old, hollow-bearing trees to younger trees with fewer hollows<sup>9</sup>. The native timber industry is therefore incompatible with the retention of tree hollows, because it is not possible to have rotation durations that allow the replacement of lost hollows. This is why logging has been repeatedly identified, including by the NSW Scientific Committee, as a key factor driving the loss of tree hollows in Australia<sup>10-13</sup>. **Logging leads to a loss of hollows and a loss of hollow-dependent wildlife.**

#### 2. Bell-miner associated dieback

Also termed 'logging dieback', bell-miner associated dieback (BMAD) is a complex cascade of ecological interactions that ultimately causes canopy dieback and sometimes death in canopy eucalypts. It is an excellent example of how logging has unforeseen consequences in forests that go beyond just the removal of trees. Moist forests, such as those

in the North East RFA region are most susceptible<sup>14</sup> and 2.5 million hectares of forest are thought to be at risk in eastern NSW<sup>15</sup>.

A simplified explanation of the mechanism behind BMAD is:

1. Logging removes the canopy allowing increased light penetration;
2. This in turn facilitates invasion by *Lantana* which provides preferred habitat for bell-miners (insect-eating birds);
3. The bell-miners drive away smaller birds to hoard insect food resources;
4. These insects feed on the leaves of eucalypts and, because there are fewer bird predators, increase in numbers;
5. The increase in insect load on the trees cause dieback and, in extreme cases, death.

### Impacts on native species

The RFA process has weakened protection for threatened species compared to that afforded under the federal *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*<sup>16</sup>. This is primarily because:

1. The states have lower regulatory requirements than those imposed by the *EPBC Act*. For example, in NSW and Tasmania the RFAs have exempted forestry operations from state laws pertaining to threatened species;
2. The states have failed to take into account new information on threatened species and biodiversity, therefore locking in poor environmental outcomes;
3. RFA reviews have not been sufficiently timely or thorough, with the result that it has not been possible to ensure compliance with RFAs and therefore to justify the accreditation of logging via the RFAs under the *EPBC Act*;
4. Monitoring, compliance and enforcement has not been sufficient, and;
5. There are limited third party participation rights. This has also resulted in the maintenance of conflict in all RFA states.

There are a total of 1413 forest-dwelling species of flora and fauna on the federal EPBC list. Between 2006 and 2011, 89 species were added to the list of threatened species while 21 were removed<sup>17</sup>. In 2004, 40 of 81 extant forest mammals in NSW were listed as threatened, and of the 41 not listed, 34 had declined<sup>9</sup>. Native forest logging is identified as a key threat to forest fauna as it drives habitat destruction and the loss of key habitat features such as large old trees and the hollows they possess<sup>10,12,13,18,19</sup>. Hollow-dependant species are known to be most sensitive to logging<sup>18,20,21</sup>.

We have recently seen substantial population declines in many common and rare species (such as greater gliders, koalas, Leadbeater's possum and the swift parrot), including local extinctions<sup>8,22-25</sup> which places remaining populations at greater risk of chance events such as large fires. The rapid decline of once-common species such as greater gliders is particularly concerning as it highlights how there is no room for complacency in the protection of forest species. **We need to stop logging now before it's too late!**

The direct impacts of logging on forest fauna is clearly illustrated by a series of studies in the Eden area of NSW that used counts of dead arboreal mammals by logging crews to answer various questions as to species distributions<sup>26-28</sup>. The studies identified 930 dead mammals of seven species (greater glider, yellow-bellied glider, feathertail glider (*Acrobates pygmaeus*), sugar glider (*Petaurus berriceps*), brush-tail possum (*Trichosurus vulpecula*), ring-tail possum (*Pseudocheirus peregrinus*) and pygmy possum (*Cercartetus nanus*)) over 5000 hectares. **Don't kid yourself: logging kills animals, they don't just run away!**

### Koalas

Koalas were not listed under the federal *Environment Protection and Biodiversity Conservation Act (EPBC Act)* during the signing of the RFAs. In 2012, koala populations in NSW, Queensland and ACT were listed under the EPBC Act after having been assessed as having undergone a population decline of 33% between 1990 and 2010<sup>8</sup>. Despite knowing that many koala populations have been declining for decades<sup>29</sup>, and awareness of policy issues preventing effective action<sup>30</sup>, recent research shows continued alarming declines in most koala populations in NSW<sup>31</sup>. **Our favourite animal is at risk of extinction, and logging is a big part of the problem.**

In March 2016 the NSW government declared 12,000ha of 'flora reserves' between the Bega and Bermagui rivers to protect the remaining koalas on the far south coast of NSW. This is an admission that logging and koalas don't go together. **We need to protect all of our koalas by ending native forest logging across NSW.**

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