

On the Edge of Extinction

**The Case for the
Swift Parrot
Protection
Plan**





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The Swift Parrot is on the edge of extinction. Current policies are failing to protect its habitat and a new management framework is desperately needed. This report outlines a new Swift Parrot Protection Plan, a management framework that will protect critical breeding habitat on public forests that are currently managed for logging. This report demonstrates how the Plan could easily be implemented by the Tasmanian Government by reducing the logging quota, a simple action that the state-run logging agency, Sustainable Timber Tasmania, has advocated for in the past.

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The authors and associated organisations recognise Australia's Aboriginal and Torres Strait Islander communities as the Traditional Owners and custodians of all Country in Australia and we pay our respect to Elders past and present. We acknowledge that this land was never ceded. We support efforts to progress recognition of the distinct rights of Indigenous peoples as well as reconciliation, land justice and equality. We welcome actions that better seek to identify, present, protect and conserve Aboriginal cultural heritage.

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Executive Summary

The critically endangered Swift Parrot has experienced a dramatic decrease in numbers in recent years, with recent population estimates suggesting that only 750 individuals remain in the wild. The species has a high likelihood of extinction within the next decade unless there is a dramatic change in management.

The primary factor leading to the Swift Parrot's decline is the continued logging of its breeding habitat in Tasmania. There has been a systemic failure by the Tasmanian Government to protect the Swift Parrot's habitat from logging. Policies introduced to protect the species are weak and often not enforced.

The Tasmanian Government has repeatedly ignored expert advice when it comes to the logging of Swift Parrot habitat. Many areas of forest have been felled despite Swift Parrot experts giving clear advice that the areas contained habitat which is crucial for the species long-term survival. This has led to the destruction of thousands of hectares of important habitat.

The Tasmanian Government has just introduced new Swift Parrot policy called the Public Authority Management Agreement (PAMA). Most scientific experts are concerned that this policy will actually weaken protections for the Swift Parrot, as it allows for large areas of breeding habitat to be logged. The major selling point by the Government for the PAMA is that 9,300 hectares of Swift Parrot habitat will be set aside from logging. However, the reality is that 69% of this area is already excluded from logging due to operational constraints or the area is already reserved. This means that only 2,900 hectares of Swift Parrot habitat is actually being protected from logging under the PAMA.

This report proposes the implementation of the Swift Parrot Protection Plan, a management policy that will adequately protect important breeding habitat on public forests that are managed for logging. The Plan has been developed with significant input from Swift Parrot scientists, who have provided leading scientific advice to the Tasmanian Government over the last 20 years.

Only 7% of public forests currently available for logging need to be protected in order to implement the Swift Parrot Protection Plan. This Plan will adequately protect Swift Parrots in Tasmania as it will ensure that there is no loss of current habitat on public land and additional forests will be set aside to provide future habitat. Legislation and comprehensive auditing will guarantee that the new policies are implemented. Critical areas of habitat will be permanently protected in formal reserves.

This Swift Parrot Protection Plan could easily be implemented by reducing or removing the logging quota which is set by the Tasmanian Resources Minister. The board of the state-run logging agency, Sustainable Timber Tasmania, has previously recommended that the quota be dropped by 30% in order to improve its financial viability. This request was ignored by the Tasmanian Government. Implementing this recommendation of a reduced logging quota would accommodate the Swift Parrot Protection Plan and would help provide adequate, long-term protection for the species.

Urgent action is needed to protect the Swift Parrot's habitat. The Swift Parrot Protection Plan, as developed by scientists, will help to save this critically endangered species. It's not too late to prevent the Swift Parrot from becoming another one of Australia's extinct species.

The Swift Parrot

An Iconic Species Under Threat



Introduction

The Swift Parrot (*Lathamus discolor*) is the fastest parrot in the world and is one of only three species of parrot on earth that migrates. Every summer, it flies from mainland Australia to Tasmania's east coast and southern forests to breed; which is one of the longest known migrations of a parrot species.

The Swift Parrot is at serious risk of extinction. It is federally listed as Critically Endangered under the *Environment Protection and Biodiversity Conservation Act 1999*. A recent population estimate suggests that there are approximately 750 birds left in the wild.¹ This is significantly lower from a decade earlier, where estimates suggested that there were 2000 birds remaining.² Research has indicated that the population could decrease by 90-95% within three generations, with a likelihood that the Swift Parrot could be extinct by 2031.³

Swift Parrot Habitat in Iutruwita/Tasmania

Swift Parrots require specific habitat for breeding. 'Nesting habitat' is any mature eucalypt forest where trees are old enough to have hollows, which are located close to 'foraging habitat', consisting of flowering Tasmanian Blue Gum (*Eucalyptus globulus*), Black Gum (*Eucalyptus ovata*) and Brooker's Gum (*Eucalyptus brookeriana*). Breeding habitat is generally restricted to eastern and south-eastern Tasmania. When the species migrates to mainland Australia over winter, its habitat consists of eucalypt forests and woodlands ranging from South Australia to Queensland.

Swift Parrots prefer Tasmanian Blue Gum for foraging, due to their higher nutritional value. Blue Gum has sporadic flowering patterns, tending to flower at varying intensities and in different locations each year. This means that the locations where Swift Parrots breed change each season as they follow the flowering patterns of the Blue Gum.⁴ In years where Blue Gums flower in low levels, Black Gums and Brooker's Gums, which flower more regularly, are especially important for Swift Parrots.

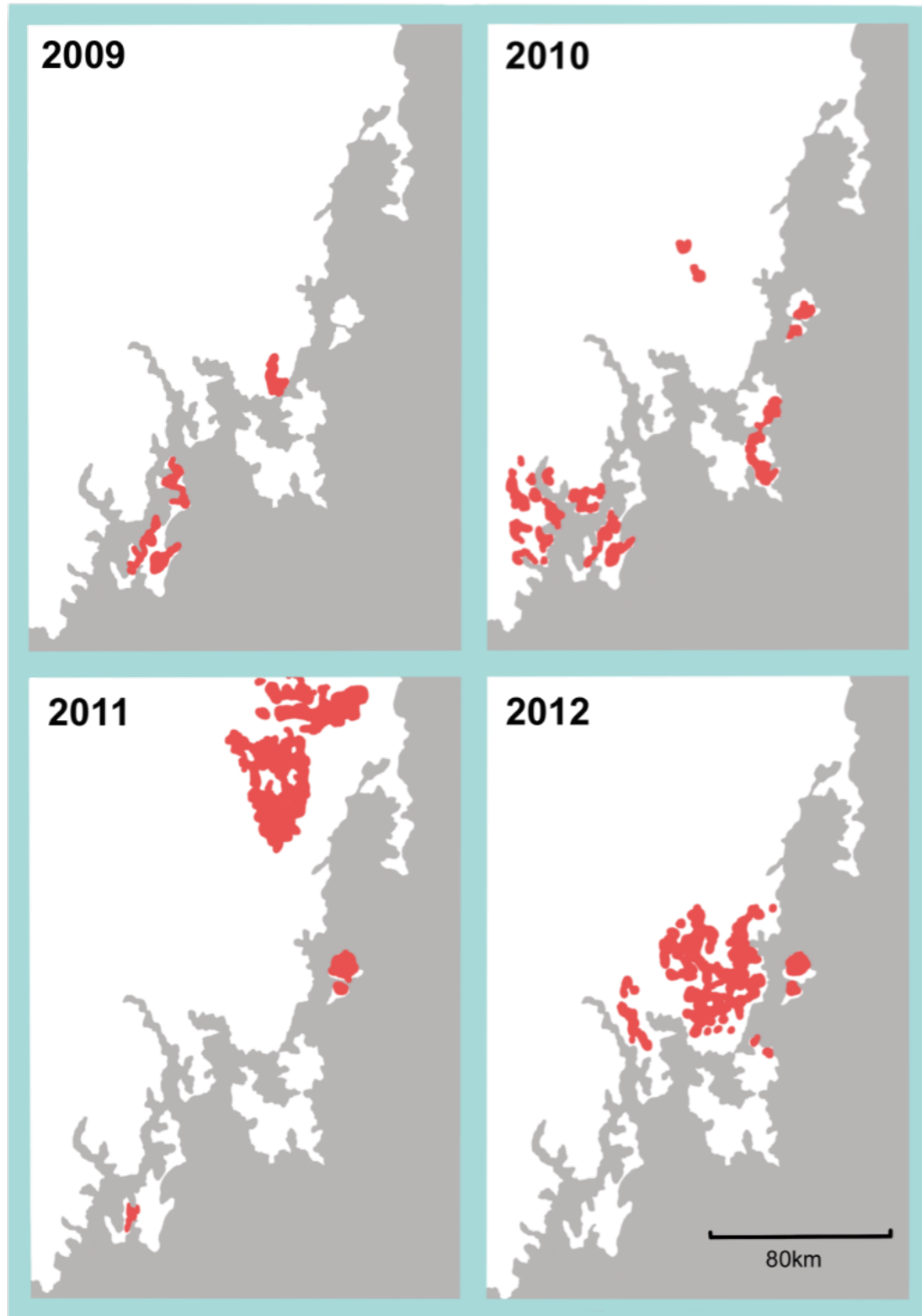
Swift Parrots nest in tree hollows, which are only found in mature eucalypt trees. This makes old-growth and mature forests critically important for the species, as it generally takes around 100-140 years for hollows to form.⁵ The location of nesting trees is also important, as they need to be within 10 km of flowering trees for feeding.⁶

As Swift Parrots do not nest in the same location each year, large areas of mature forest and foraging habitat need to be protected within the species' range in order to offer adequate protection.³ Protecting mature trees is particularly important, because larger, older trees provide nesting habitat, and larger Blue Gum trees support more foraging parrots than do smaller trees.⁷

Suitable habitat for Swift Parrots in Tasmanian has been greatly diminished by 200 years of forest clearing and logging. Consequently, the present extent of Swift Parrot habitat is now restricted to small remaining fragments of Blue Gum and Black Gum forests across southern and eastern Tasmania, forests which were much larger and extensive before colonisation.

Swift Parrots nest in different locations each year

This map shows where Swift Parrots have nested over a four year period. The location changes as their main food source, the Tasmanian Blue Gum, flowers in different locations and intensities every year. Due to this variation in breeding location each year, Swift Parrot conservation efforts need to reserve large areas of forests across Tasmania.



Current Threats

The main threat to the Swift Parrot is habitat destruction.^{8,9,10} Some habitat is being lost through urban development, but the major source of loss is the logging of mature forests.^{9,10,11} While habitat destruction is an issue across the Swift Parrot's migratory range in the south-east of mainland Australia, the problem is particularly acute in the species' breeding habitat in Tasmania. The Draft National Recovery Plan for the species states that "ongoing logging of breeding habitat remains a threat to the species' persistence in the wild."¹²

Once logged, important hollow-bearing trees are often permanently lost as forests are converted into near-permanent younger age classes due to short logging rotations.¹³ These short rotations mean that forests are often repeatedly logged and trees may never grow old enough to form hollows. Logging also removes older Blue Gum and Black Gum trees which flower more reliably and profusely than younger forests.⁷

Fire can impact Swift Parrots by disturbing foraging and nesting habitat.¹⁴ Fire is becoming a growing threat as the effects of climate change increase the severity and duration of the bushfire season.¹⁵ Furthermore, studies have shown that there is a link between logging and increased fire severity.^{16,17} This is due to logging replacing mature forests with highly flammable, younger eucalypt during regeneration.

Moreover, some Swift Parrots die each year from collisions with fences, buildings and vehicles, especially where breeding habitat occurs in suburban areas.¹⁸ These threats to Swift Parrots in residential areas make intact forest landscapes even more important for maintaining the species' population.

Are Sugar Gliders at fault?

Sugar gliders are a small species of possum that are native to mainland Australia but were introduced to Tasmania in the 1850's. Sugar Gliders have been found to invade Swift Parrots' nests and prey on eggs, young and even female adult birds.⁸

The forestry industry cites Sugar Glider predation as the major factor leading to the decrease in Swift Parrot numbers. However, there is clear evidence that removing foraging and nesting habitat via logging is the primary threat to the Swift Parrot.^{8,9,10}

In fact, Sugar Gliders occur in higher numbers in areas which have previously been logged.^{8,19} Logging mature forests therefore increases the risk of Sugar Glider predation of Swift Parrots. Since the Swift Parrot population has been reduced so much by logging, any predation by Sugar Gliders is detrimental and increases the risk of extinction. The easiest way to address this risk is to protect mature forest within the Swift Parrots' breeding range.

Extent of Swift Parrot Habitat Logging

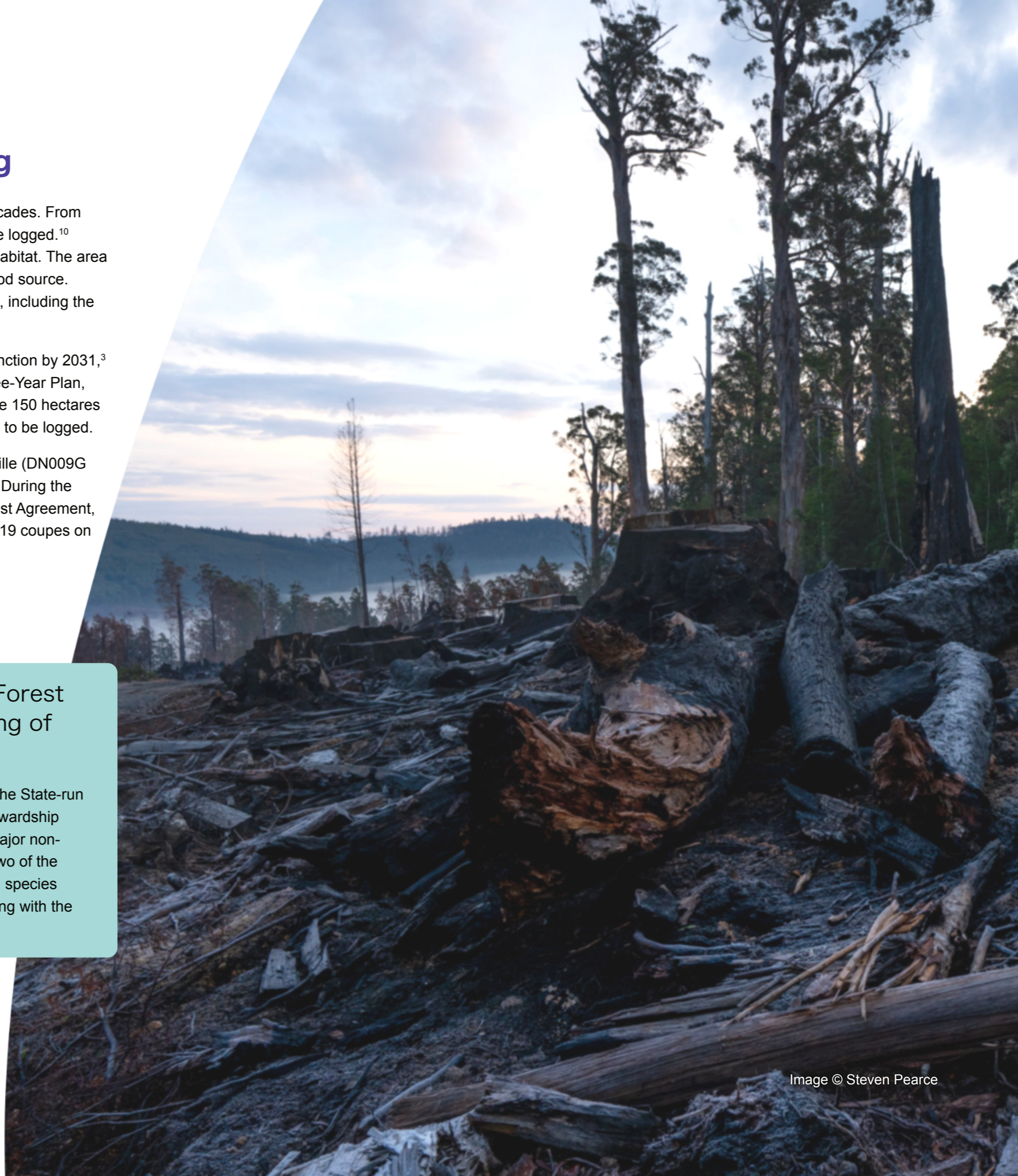
Large areas of Swift Parrot breeding habitat have been logged over the last few decades. From 1997 to 2016, 23% of old-growth forests in the Southern Forests of Tasmania were logged.¹⁰ Before logging, these old growth forests would have provided high-quality nesting habitat. The area also contained extensive Blue Gum forests which would have been an important food source. Decades of logging has also occurred in other areas of the species' breeding range, including the Eastern Tiers and Wielangta.

Despite extensive warnings by scientists that the Swift Parrot could be close to extinction by 2031,³ large areas of Swift Parrot habitat are still scheduled to be logged. The current Three-Year Plan, which shows the logging schedule of Tasmania's public forests, shows that there are 150 hectares of prime Blue Gum foraging habitat and 1500 hectares of nesting habitat scheduled to be logged.

As recently as October 2021, two logging coupes in the Denison valley near Huonville (DN009G and RU034B), both of which contained important Swift Parrot habitat, were logged. During the Bob Brown Foundation's 2020 legal case challenging the Tasmanian Regional Forest Agreement, these two coupes were identified, by a Swift Parrot expert, as being among the top 19 coupes on the Three-Year Plan most important to the Swift Parrot.

Sustainable Timber Tasmania failed twice to gain Forest Stewardship Council certification due to the logging of Swift Parrot habitat

The ongoing logging of habitat of a critically endangered species has meant that the State-run logging agency, Sustainable Timber Tasmania, has twice failed to gain Forest Stewardship Council (FSC) certification. In 2020, Sustainable Timber Tasmania failed on ten major non-conformities, six of which were for the continued logging of Swift Parrot habitat. Two of the other non-conformities were for the logging of old-growth forests. Poor threatened species management was also cited as a reason for the failure of certification in 2016, along with the logging of old-growth forests.



Conservation Failure

How Policy Has Failed to Protect the Swift Parrot

Introduction

The Swift Parrot is perhaps one of the best-studied threatened species in Australia. A large body of scientific evidence clearly demonstrates that logging practices in Tasmania are directly resulting in the loss of critical habitat and are contributing to the decrease in Swift Parrot numbers.^{8,9,10} The link between the logging of breeding habitat and the decrease of the species is clearly understood by land managers and governments, yet the State and Federal Governments have failed to act on this extensive and well-researched information.

In Tasmania, there has been an absolute failure of the State Government to address this issue. Policies and management plans implemented by the Government to protect the Swift Parrot are weak and inadequate. Often, policies do not go far enough to protect important habitat and many are recommendations rather than legally-binding instruments. Recommendations to protect breeding habitat are often not implemented and, on numerous occasions, expert advice has been ignored.

In 2018, Swift Parrot researchers published a paper outlining a number of ways the State Government has failed in preventing the decline of the Swift Parrot.¹⁰ The paper detailed how breeding habitat continues to be logged despite there being extensive evidence that logging is driving the species toward extinction. Other researchers have noted a “deep-seated reluctance, at all levels of government, to prevent habitat loss (of the Swift Parrot), even when there are obvious alternatives to destroying it.”²⁰

Current Policies Relating to the Swift Parrot

In Australia, threatened species are managed under the Federal *Environmental Protection and Biodiversity Conservation* (EPBC) Act. However, in most states, land subject to native forest logging operations is managed under Regional Forest Agreements which take legal precedence over the EPBC Act.²⁰ The Regional Forest Agreements exempt native forest logging operations from the EPBC Act and offer significantly less protection for threatened species.

On forestry land in Tasmania, threatened species management is guided by the *Forest Practices Code* under a set of Agreed Procedures. The Agreed Procedures provide recommendations for management through an online planning tool called the Threatened Species Advisor.²¹ The Advisor has several recommendations when it comes to managing Swift Parrots, but these recommendations are voluntary and often are not implemented.

One of these recommendations states that a one hectare reserve should be placed around known Swift Parrot nest trees. This policy has been criticised by experts as being inadequate as many nests go unrecorded due to difficulties finding them.¹⁰ Many formally recorded nests are yet to have a reserve established around them, suggesting that Sustainable Timber Tasmania may be behind in implementing protection around known nest trees. Either way, despite this policy, nesting trees continue to be logged. Often this is due to uncertainty about the exact location of the nest tree or unwillingness to alter logging plans once they have been approved.¹⁰

Other recommendations under Threatened Species Advisor call for the protection of foraging and nesting habitat. The Advisor recommends protections should be applied unless 'alternative management actions' are approved by the Forest Practices Authority and the Department of Natural Resources and Environment Tasmania (DNRET). In practice, however, these 'alternative management actions' may consist of protecting as little as 5% of a logging coupe,²² which does very little in reality to conserve Swift Parrot habitat.

The Forest Practices system is too simplistic to adequately protect a critically endangered species because it ignores the species' well documented habitat requirements. These poorly implemented and weak recommendations have allowed for thousands of hectares of Swift Parrot habitat to be logged over the last decade. These recommendations are not strong enough to protect the species from extinction.

Key problems with current Swift Parrot protections

- Most policies are recommendations and are not legally binding. This means that many policies are not being implemented.
- Nest trees are not always protected due to uncertainty about the exact location or unwillingness to alter logging plans once they have been approved.
- Existing protection policies can easily be overridden and ignored by government departments and be replaced with very weak management actions that do little to protect Swift Parrot habitat.

Failure to Implement Policies

One of the greatest concerns when it comes to the management of Swift Parrot habitat is how the Tasmanian Government has continued to ignore the advice of Swift Parrot experts and researchers. Under the Threatened Species Advisor, if a logging coupe is likely to impact on Swift Parrot habitat, the Forest Practices Authority is to be informed, which often refer to a Swift Parrot specialist for expert advice. The final decision if a coupe is to be logged rests with the senior civil servants in the Department of Natural Resources and Environment Tasmania (DNRET).

However, expert advice has been routinely ignored by the Tasmanian Government when it comes to making decisions on the logging of Swift Parrot habitat. Two Right to Information requests in 2014 and 2017 found that there were multiple times where the Forest Practices Authority referred to Swift Parrot experts for advice on certain logging coupes.^{23,24} The experts advised that particular areas of forest contained critically important habitat for the Swift Parrot. They clearly stated that the logging of these areas would have a significant impact on the overall population. A description of one of the logging coupes stated that it was 'an outstanding example of remaining habitat for the species. The area contains important breeding habitat with high density Blue Gum foraging habitat and numerous nesting sites'. DNRET ignored this advice and approved the logging of these forests.^{23,24}

One of the most alarming examples of negligence of Swift Parrot management by the Tasmanian Government is the 2017 logging of a long-term scientific monitoring site known as Tyler's Hill. Swift Parrots had been monitored at Tyler's Hill for more than a decade, but researchers visiting the site were confronted with it having been logged. The area was a known nest site for the species and although one known nest tree was retained, many other nearby potential nest trees were felled.²⁵

Furthermore, interviews from an ex-government Swift Parrot researcher have shown that he felt pressured to change threatened species advice to allow critical Swift Parrot habitat to be logged.

Dr Matthew Webb, who formerly worked at the threatened species section of the State Government, said senior officials repeatedly expected him to alter his scientific opinion, mostly on whether it was safe to log Swift Parrot habitat.²⁶

- Expert advice from Swift Parrot scientists which state that important habitat should not be logged is routinely ignored
- A long-term monitoring plot used by Swift Parrot researchers for over a decade was logged
- Swift Parrot researcher felt pressured to change his advice about protecting important habitat by senior government officials

The PAMA: New Policy with Poor Protection

In August 2020, the Tasmanian Government announced a new Swift Parrot management plan called the Public Authority Management Agreement (PAMA). Many experts are concerned that the implementation of the PAMA will essentially weaken protections for the Swift Parrot. Other than a small area of nesting habitat set aside from logging, the PAMA offers no strong protections for the Swift Parrot.

Tasmanian Government has routinely claimed that the PAMA will protect 9,300 hectares of important nesting habitat from logging in the Southern Forest region.²⁷ However, 69% of the area proposed by the PAMA is already classed as informal reserves or non-production forests and is therefore already excluded from logging. In reality, the PAMA is only protecting around 2,900 hectares of Swift Parrot nesting habitat that was under threat from logging.²⁸

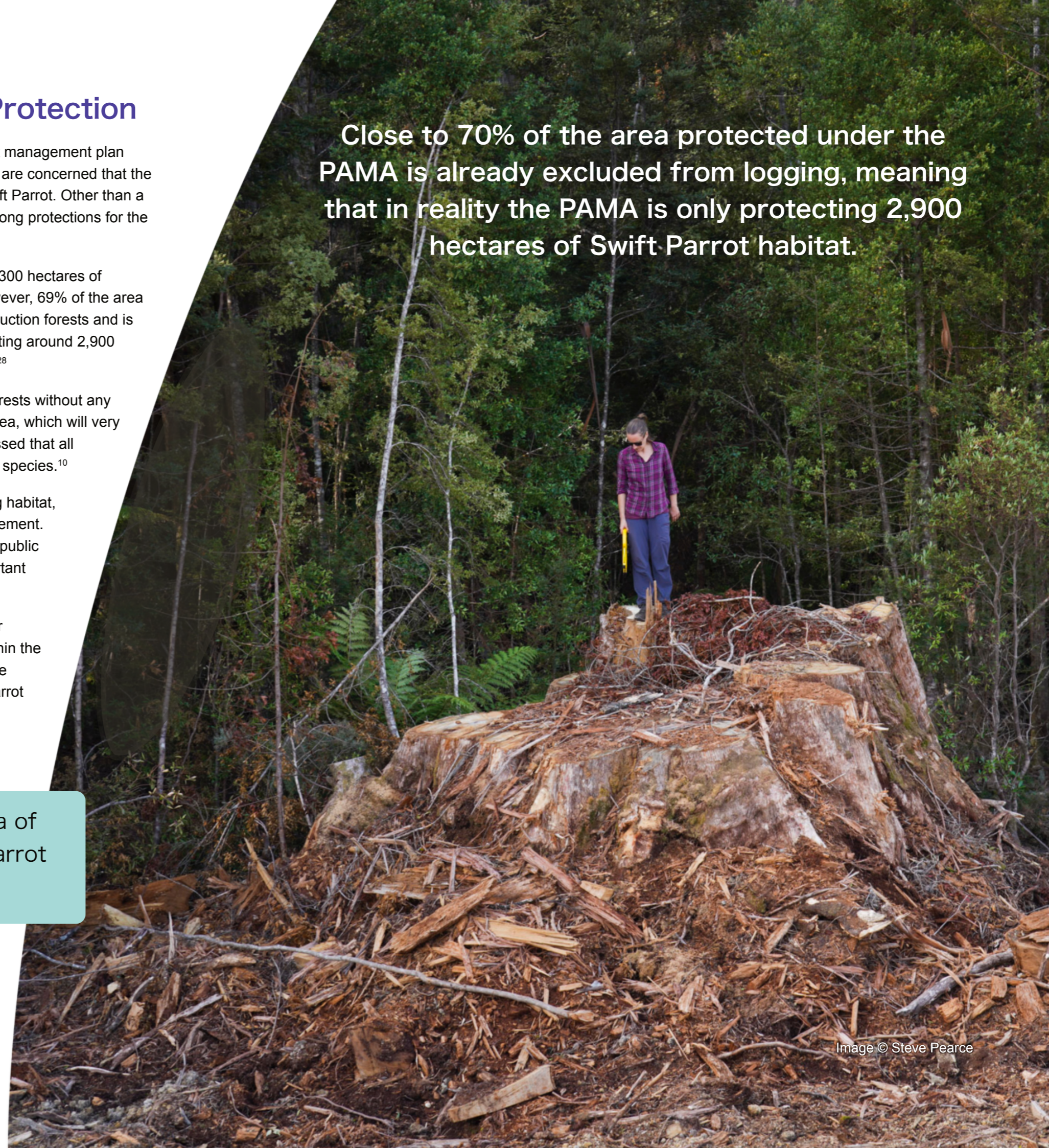
The PAMA leaves 22,600 hectares available for logging in the Southern Forests without any restrictions on the destruction of Swift Parrot habitat. This is a significant area, which will very likely have an impact on species' population. Experts have repeatedly stressed that all remaining habitat must be protected to ensure the long-term survival of the species.¹⁰

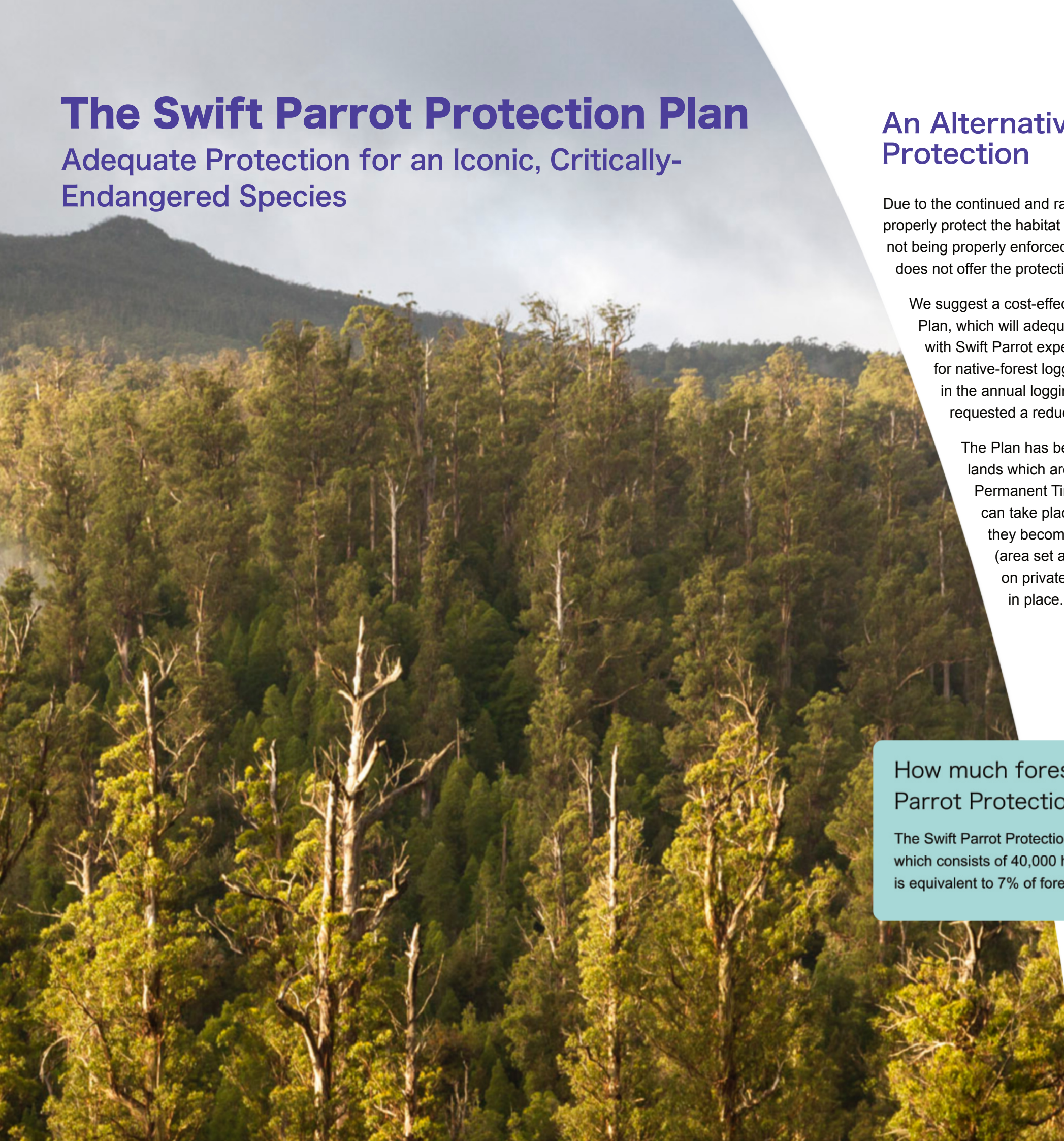
The protected areas under the PAMA only refer to nesting habitat. Foraging habitat, which is essential for the survival of the species, is not included in the agreement. Additionally, so far the PAMA only refers to the Southern Forest region. No public commitment has been given as to whether the PAMA will cover other important breeding areas such as Tasmania's East Coast.

Current management of Swift Parrot under the Threatened Species Advisor recommends that areas containing mature nesting and foraging habitat within the species breeding range be retained. If these current recommendations were properly enforced, it would provide much greater protection for the Swift Parrot than the PAMA.

Close to 70% of the area protected under the PAMA is already excluded from logging, meaning that in reality the PAMA is only protecting 2,900 hectares of Swift Parrot habitat.

The PAMA will only protect a very small area of habitat. It is not enough to save the Swift Parrot from extinction.





The Swift Parrot Protection Plan

Adequate Protection for an Iconic, Critically-Endangered Species

An Alternative Plan that will Provide Adequate Protection

Due to the continued and rapid decrease of Swift Parrot numbers, urgent action is needed to properly protect the habitat of this critically endangered species. It is clear that current policies are not being properly enforced and appear unable to protect the species from extinction. The PAMA does not offer the protection that is needed to prevent further decreases in Swift Parrot numbers.

We suggest a cost-effective and easily implemented alternative, the Swift Parrot Protection Plan, which will adequately protect Swift Parrot habitat. This plan, developed in conjunction with Swift Parrot experts, protects all foraging and nesting habitat on public land managed for native-forest logging operations. The Plan could easily be achieved through a reduction in the annual logging quota. The board of Sustainable Timber Tasmania have previously requested a reduction in its logging quota in order to improve its financial viability.

The Plan has been developed to apply to all Swift Parrot breeding areas on public lands which are subject to logging. The plan focuses on areas categorised as Permanent Timber Production Zone (areas of public land where logging operations can take place). The Plan should also be expanded to include any other areas if they become available for logging, such as the Future Potential Production Forests (area set aside for conservation under the Tasmanian Forest Agreement). Logging on private land is beyond the scope of this plan, but a similar policy could be put in place.

How much forest would be protected under the Swift Parrot Protection Plan?

The Swift Parrot Protection Plan would ensure the protection of approximately 60,000 hectares, which consists of 40,000 hectares of current habitat and 20,000 hectares of future habitat. This is equivalent to 7% of forests on state land which are currently available for logging.

Protection of all Breeding Habitat

Swift Parrot experts have recommended that conservation planning should focus on the protection of hollow-bearing mature forest and foraging habitat.¹⁰ The most effective action that can be undertaken to safeguard Swift Parrot populations is to protect as much of its breeding habitat as possible.

The Swift Parrot Protection Plan ensures that all suitable foraging and nesting habitat across the core breeding range is protected. Large areas of forest need to be protected as Swift Parrots have a wide breeding range due to the species nesting in different locations each year. The habitat mapped on public land to be protected under the plan roughly equates to 40,000 hectares within the Permanent Timber Production Zone. This equates to approximately 5% of the zone.* This will provide genuine conservation benefits for the species – this is likely to be our last chance to stop its decline to extinction.

Creating Future Habitat

An important part of the Swift Parrot Protection Plan is to increase the amount of habitat available in the future. Protecting existing habitat helps to ensure the numbers do not decrease further, but if we want numbers to increase, then we need to protect more forests that will become important habitat in decades to come.

The aim of the Swift Parrot Protection Plan is to allocate 50% of 'future habitat' relative to the 40,000 hectares of breeding habitat which is protected under the plan. This would equate to 20,000 ha, or 2% of the Permanent Timber Production Zone.* The areas protected for future habitat need to be high quality forests as identified by Swift Parrot experts using a standard conservation prioritisation process. Future habitat would contain both nesting and foraging habitat.

Legally-Binding Implementation and Formal Protection

A key feature of this new Swift Parrot Management Plan is that its policies are to be legally binding. As such, penalties must be given to organisations and individuals that breach the outlined policies. This will be a significant improvement over the current Swift Parrot recommendations that are not legally binding and therefore not being properly enforced.

Another key feature of this Swift Parrot Protection Plan is that reserved areas of a significant size will have formal protection, an improvement over their current status with only informal protection for reserved areas in Forestry-managed public forests.

*See appendix for details

The Swift Parrot Protection Plan comprises of:

1. No loss of Swift Parrot habitat across the species breeding range. All patches of forest which contain nesting and foraging habitat are to be retained. This includes:
 - All hollow bearing trees, trees greater than 150 cm in diameter in wet forests and 70 cm in diameter for dry forests are to be retained. Trees are to be retained within a suitably sized buffer.
 - All Blue Gum over 40 cm in diameter and Black Gum or Brooker's Gum over 20 cm in diameter are to be retained. Trees are to be retained within a suitably sized buffer.
2. Protect younger forests to provide future habitat. High quality future habitat is to be retained so that it will extend the current breeding habitat by 50%.
3. Legislation and comprehensive auditing that ensures policies are strictly implemented.
4. Formal reservation of large areas of known breeding habitat to ensure permanent protection.

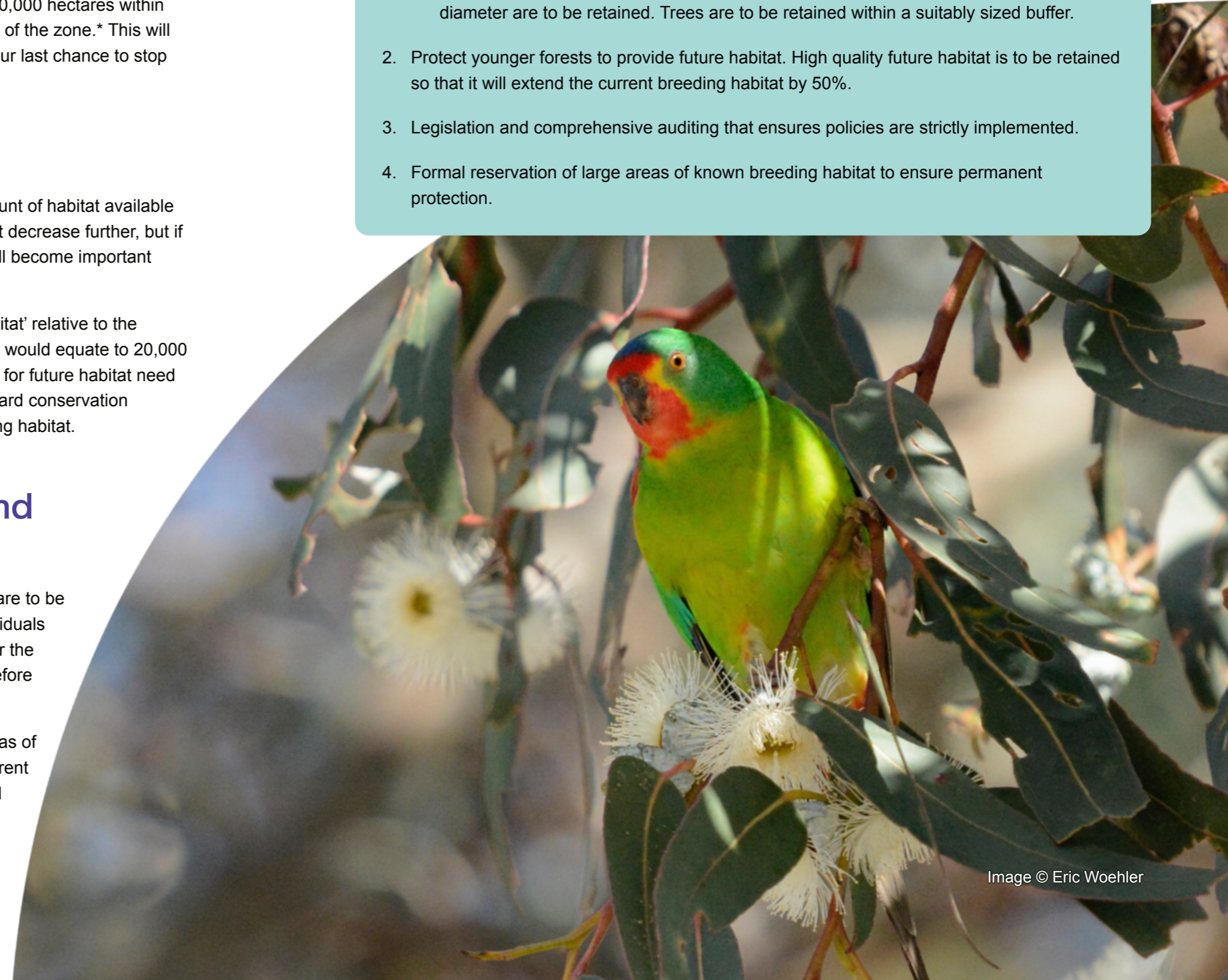


Image © Eric Woehler

What the Swift Parrot Protect Plan Would Mean for the Wood Supply

The Swift Parrot Protection Plan will not exclude all logging within the species' breeding range. This is because there are extensive areas within the Swift Parrot Important Breeding Area that do not have key habitat requirements such as mature, hollow-bearing trees or Blue Gum, Black Gum or Brooker's Gum that provide foraging habitat.

Under current legislation, 137,000 cubic metres of sawlogs need to be made available for logging each year. Over the last five years the actual amount logged has been an average of 122,000 cubic metres of sawlogs. In order to implement the Swift Parrot Protection Plan, an estimated reduction of 29,400 cubic metres of sawlogs, or 21% of the overall state wood supply is required.*

Sustainable Timber Tasmania lost over \$1.3 billion from 1997-2017 and has been heavily subsidised by the Tasmanian Government over the last few decades.³⁰ In September 2016, the Board of Sustainable Timber Tasmania formally advised the Minister for Resources that native forest logging on State land was not profitable under its current quota and was likely to remain that way for the foreseeable future. The Board requested to reduce the logging quota to 96,000 cubic metres per year in order to improve its financial viability. However, the Resources Minister declined to lower the sawlog quota.³⁰

A reduction in the sawlog quota is not only possible, it is being advocated by the State-run logging agency itself. Reducing the quota, or removing it entirely, would mean that the industry would no longer be dependent on government subsidies. We propose that the sawlog quota be removed entirely, or at the very least dropped to 96,000 cubic metres per year as recommended by Sustainable Timber Tasmania. This will allow for important habitat to be reserved under the Swift Parrot Protection Plan.

Impact on wood supply

The implementation of the Swift Parrot Protection Plan would impact approximately 20% of the state's wood supply. This can easily be accounted for by reducing or removing the saw log quota. In 2016 by the Board of Sustainable Timber Tasmania requested a reduction in the quota to 96,000 cubic metres. If the State Government adopted this request, the Swift Parrot Protection could be easily implemented.



Other Conservation Values of the Swift Parrot Protection Plan

Often termed umbrella species, the protection of one species can frequently benefit many others, especially those that rely on similar habitats. The adequate protection of hollow-bearing trees for the Swift Parrot could assist other hollow-dependent threatened species. This includes the Masked Owl which is listed as vulnerable under the EPBC Act.

Many other Tasmanian animals rely on hollows, including bird species such as Parrots, Lorikeets, Owlet-nightjars and Pardalotes, as well as several species of mammals including Possums and Bats.⁵

Mature forests are critically important for hollow-dependent species, but they also provide habitat for a variety of other animals. For instance, Wedge-tailed Eagles prefer to nest in large patches of mature forests.³¹ Tasmanian Devils and Spotted-tailed Quolls have been found to regularly inhabit old-growth forests.

Other benefits come with the protection of mature forests such as the storage of large amounts of carbon. Tasmania's wet eucalypt forests are some of the most carbon dense in the world³² and protecting them prevents many significant amounts of CO₂ being released into the atmosphere. Furthermore, mature forests have been found to burn at a lower severity to younger forests, making them important for natural bushfire suppression^{16,17}. Tasmania's mature forests also provide many cultural and economic values such as tourism and recreation benefits.

*See appendix for details

Image © Steve Pearce

Recommendations

1. Implement the Swift Parrot Protection Plan to ensure that all breeding habitat for the Swift Parrot is protected.
2. Ensure that the Plan is legally binding and that it is enforced. Penalties must be given to organisations and individuals that breach the management prescriptions outlined in the plan.
3. Remove the logging quota, or at a minimum legislate a reduction in the wood quota to 96,000 cubic metres per year, as recommended by Sustainable Timber Tasmania's Board.

Conclusion

The Swift Parrot is on the edge of extinction and we need to act now if we wish to save this iconic species. The best way to protect the Swift Parrot is to immediately adopt a robust and enforceable management policy that prevents important habitat from being destroyed. Future habitat must also be identified and protected to support the recovery of the Swift Parrot population. The Swift Parrot Protection Plan will ensure that 60,000 hectares of native forest be set aside to protect the species.

The Swift Parrot Protection Plan could easily be implemented by the Tasmanian Government by reducing the sawlog quota by 20%, or by removing the quota system altogether. A reduction in the quota to 96,000 cubic metres has already been recommended by Sustainable Timber Tasmania, in order to improve their financial viability. Reducing or removing the quota is a logical step in the right direction. Not only will it help protect a threatened species, but less taxpayer money would be needed to subsidise the forestry industry.

Many threatened species across Australia face issues which are very difficult to address, such as climate change or competition from introduced pests. In comparison, the number one threat to the Swift Parrot is the destruction of habitat by logging. With a simple change in policy, this can be easily and promptly addressed. It just takes the political will power to do so.

Australia holds the unwanted title as being the world leader in animal extinctions. We need to take urgent action if we are to prevent the Swift Parrot from becoming another one of Australia's extinct species. It is essential that its habitat be protected. The Swift Parrot Protection Plan is a step in the right direction to help save this critically endangered species.

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Appendix

Calculations of how much land would need to be protected within the Permanent Timber Production Zone

An estimation of how much land would need to be protected under the Swift Parrot Protection Plan was calculated using the following GIS mapping layers: Permanent Timber Production Zone (PTPZ), Globmap (*Eucalyptus globulus* distribution), Swift Parrot Important Breeding Area (SPIBA) and the Mature Habitat Availability.

The area of all High, Medium and Low Density Mature Habitat and Globmap on PTPZ land within in the SPIBA and the Denison, Barnback and Russell River forests blocks was calculated. This totalled to 39,989 ha, plus an additional 50% was added to account for future habitat. The 60,000ha is 7% of the 812,000 ha of Permanent Timber Production Zone.

There is likely to be errors in this final figure as there are known inaccuracies in both the Globmap and Mature Habitat Availability mapping layers.

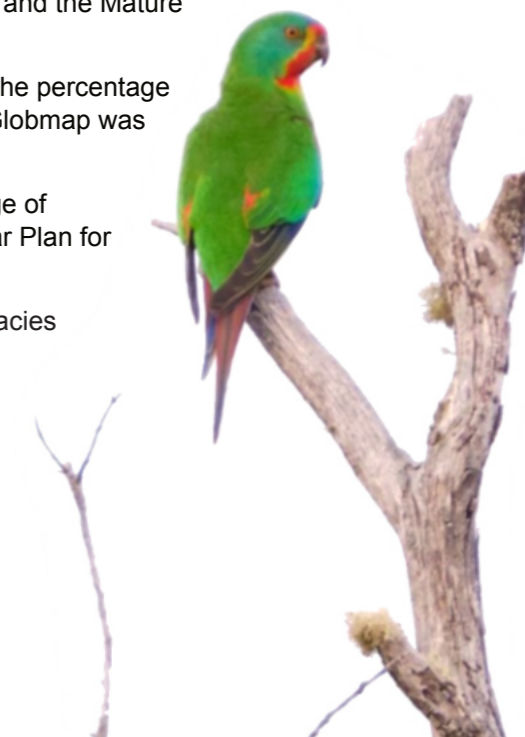
Calculations for how the implementation of the Swift Parrot Protection Plan will impact wood supply

An estimation of the impact of the Swift Parrot Protection Plan on the wood supply has been calculated using information provided in Sustainable Timber Tasmania's Three Year Plan and the Mature Habitat Availability Layer.

Coupes listed in the Three Year Plan within the SPIBA were identified. The percentage of High, Medium and Low Density Mature Habitat and area containing Globmap was calculated within these coupes.

An estimate of the wood quota was derived by multiplying the percentage of mature habitat with the estimated sawlog amount listed in the Three Year Plan for each coupe. An additional 50% was added to account for future habitat.

There is likely to be errors in this final figure as there are known inaccuracies in both the Globmap and Mature Habitat Availability mapping layers.



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