Greater Glider, Koala & Powerful Owl **Detection Report**

Proposed Wombat-Lerderderg National Park:

VicForests TUP Coupes 208-502-0006, 208-502-0007, 208-503-0029, 208-503-0030, 208-503-0027, 208-503-0028, 208-503-0025



Abstract:

Within and adjacent VicForests TUP coupes 208-502-0006, 208-502-0007, 208-503-0029, 208-503-0027, 208-503-0028, 208-503-0025, 208-503-0030, an investigation was undertaken to identify the presence/absence of threatened nocturnal wildlife inhabiting the forested area. This report details, amongst other things, the presence of 40 threatened Greater Gliders (Petauroides volans) across three survey nights. The following report concludes that VicForests are planning logging operations within forest inhabited by the threatened Greater Glider, listed under the 'Flora and Fauna Guarantee Act 1988' as of 2017. The methodology, results, discussion and recommendations from this investigation are detailed below.

Field surveyors: Blake Nisbet, Hayley Forster (VNPA)

Author: Victorian National Parks Association (VNPA)

Dates of nocturnal spotlighting: 18-21/01/2022

Date of report: 17/02/2022

Acknowledgements: The Victorian National Parks Association acknowledges the many Traditional Owners of Victoria's natural areas. Aboriginal people occupied Victoria for tens of thousands of years before their communities were decimated by European occupation. This report acknowledges the long history of Indigenous occupation, and respects the ongoing roles and responsibilities of Victoria's Traditional Owners in caring for country.

Introduction:

On 24 June 2021, the Andrews Government announced the establishment of new National Parks in Victoria's Central West forests, which included a change in public land use for the Wombat State Forest east of Daylesford, into the new Wombat-Lerderderg National Park. This announcement from the government was in response to a detailed investigation report from the Victorian Environmental Assessment Council (VEAC). The announcement largely accepts the recommendations from VEAC's report however also allows for the proposed National Parks to be logged prior to their establishment, including some targeted logging in the Wombat. This is not in line with the VEAC's expert recommendations.

In June 2021 large swathes of the Wombat Forest were damaged by a serve wind event that caused massive damage to the forests and critical habitat of local wildlife including the Greater Glider and Powerful Owl.

VicForests Timber Utilisation Plan (TUP) coupes within the Government-announced Wombat-Lerderderg National Park were investigated by surveyors from the VNPA to assess the presence of threatened nocturnal fauna. The TUP coupes can be seen below in the red box, shown in relation to the proposed changes to public land use as per Government announcement in the surrounding area.

In April 2022 VicForest surprisingly released a plan to salvage log 4,000 ha of forests in the Wombat and Cobaw Forests under a new Forest Restoration TUP even though the area was accepted to become a National Park and Conservation Park through the acceptance of the VEAC recommendations.

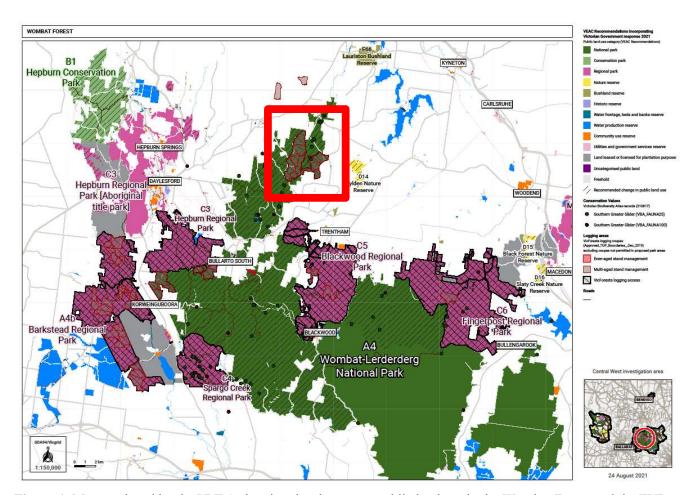


Figure 1. Map produced by the VNPA showing the changes to public land use in the Wombat Forest and the TUP coupes under investigation within the red box.

Methodology (Spotlighting surveys):

- During the nights of 18-19, 19-20 and 20-21 of January 2022, spotlighting transect surveys were conducted within and adjacent Vicforests TUP coupes 208-502-0006, 208-502-0007, 208-503-0029, 208-503-0027, 208-503-0028, 208-503-0025 & 208-503-0030 in the proposed Wombat-Lerderderg National Park
- The canopy of the forest was searched to detect the presence/absence of Greater Gliders and other nocturnal arboreal fauna by engaging a hand-held spotlight to detect 'eye shine' within the canopy.
- Upon detection of Greater Gliders, spotlights and a Sony video recorder with capable zoom was used for species identification.
- Once species were confirmed to be Greater Gliders, video footage was taken where the individuals were first observed.
- A unique GPS waypoint was then created for each Greater Glider waypoint, marked either directly below the animal or projected to the animal location using the GPS 'Sight N Go' feature which projects using distance and bearing from the observer. Some non-target species were also marked during these surveys.
- The waypoints given followed the sequence of:
 - firstly, three-five letters &/or numbers at the beginning represented a unique sequence for the nocturnal survey e.g. 'ABY'.
 - then, the following two numbers represented the individual count of threatened species encountered throughout the survey e.g. '01' for the first Greater Glider encountered
 - then, two-three letters representing a unique species code e.g. 'GG' for greater glider.
 - and finally, for most of the data recorded a 'V' was given to individuals that were identified visually instead of 'A' for aurally.
- Following the conclusion of surveys, the species detection waypoints were mapped using QGIS to identify the number of Greater Gliders detected per spotlighting kilometer in patches of forest scheduled for logging on the TUP.

Results. Table of Survey Results in Wombat-Lerderderg National Park TUP Coupes:

The survey results from the three nights of nocturnal spotlighting surveys can be seen in Table 1 below. The table columns outline the dates, times, species identifications and GPS locations for each detection, as well as each waypoint name marked in the field. The species records from Table 1 below are mapped in relation to other features in Figures 2-7 below. In total, 40 Greater Gliders, 1 Powerful Owl, 4 Koalas, 1 Southern Boobook Owl, 1 Feathertail Glider and 7 Ringtail Possums were recorded during spotlighting surveys.

Table 1. Species records from the three nights of spotlighting in the proposed Wombat-Lerderderg National Park on 18-21/01/2022.

Spotlighting Survey	Approximate Time of Detection	Date of Detection	Waypoint Name	Species	GPS Location
#1 (18-19/01/2022)	9:33 PM	18/01/2022	SERVICES	Ringtail Possum	DOMESTIC ORDER

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#1 (18-19/01/2022)	1:30 AM	19/01/2022	WOMS114GGV	Southern Greater Glider	55H 259226 5864626
Spotlighting Survey	Approximate Time of Detection	Date of Detection	Waypoint Name	Species	GPS Location
#1 (18-19/01/2022)	1:39 AM	19/01/2022	Van-1910-1	Southern Greater Glider	See many many
#1 (18-19/01/2022)	1:40 AM	19/01/2022		Southern Greater Glider	Employee (many)
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#2 (19-20/01/2022)	9:33 PM	19/01/2022		Southern Greater Glider	3 4
#2 (19-20/01/2022)	10:01 PM	19/01/2022		Southern Greater Glider	3
#2 (19-20/01/2022)	10:04 PM	19/01/2022		Southern Greater Glider	Str. Sector Sectors
#2 (19-20/01/2022)	10:14 PM	19/01/2022		Southern Greater Glider	i
#2 (19-20/01/2022)	10:18 PM	19/01/2022		Southern Greater Glider	-
#2 (19-20/01/2022)	10:21 PM	19/01/2022		Southern Boobook Owl	<u> </u>
#2 (19-20/01/2022)	10:21 PM	19/01/2022		Southern Greater Glider	1 5
#2 (19-20/01/2022)	10:26 PM	19/01/2022		Southern Greater Glider	
#2 (19-20/01/2022)	10:30 PM	19/01/2022		Southern Greater Glider	5
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#2 (19-20/01/2022)	11:24 PM	19/01/2022		Southern Greater Glider	3

#2 (19-20/01/2022)	11:30 PM	19/01/2022	ABY07GGV	Southern Greater Glider	55H 260153 5866289
Spotlighting Survey	Approximate Time of Detection	Date of Detection	Waypoint Name	Species	GPS Location
#2 (19-20/01/2022)	11:35 PM	19/01/2022		Southern Greater Glider	SEL DEDITION TORRORS
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#2 (19-20/01/2022)	11:52 PM	19/01/2022		Southern Greater Glider	50 000 000 3
#2 (19-20/01/2022)	11:53 PM	19/01/2022		Southern Greater Glider	Day Committee (MMC/RC)
#3 (20-21/01/2022)	11:04 PM	20/01/2022		Koala	(m) (m) (m) (m)
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#3 (20-21/01/2022)	11:28 PM	20/01/2022		Southern Greater Glider	500 1000 1000 1000
#3 (20-21/01/2022)	11:29 PM	20/01/2022		Southern Greater Glider	50- 00-00-02
#3 (20-21/01/2022)	11:29 PM	20/01/2022		Southern Greater Glider	50 30 00 00 00
#3 (20-21/01/2022)	11:36 PM	20/01/2022		Feathertail Glider	See 1807 12 180 197
#3 (20-21/01/2022)	12:11 AM	21/01/2022		Koala	Dir Marie Marie
#3 (20-21/01/2022)	12:17 AM	21/01/2022		Southern Greater Glider	San assiste associa
#3 (20-21/01/2022)	12:18 AM	21/01/2022		Southern Greater Glider	-
#3 (20-21/01/2022)	12:29 AM	21/01/2022		Koala	DO AND MALE
#3 (20-21/01/2022)	12:32 AM	21/01/2022	MARKETON	Powerful Owl	50 3000 0000

Results. Maps of Survey Results in Wombat-Lerderderg National Park TUP Coupes & Wombat Forestcare records within Forest Restoration TUP

Figures 2-7 below are a series of maps showing the species records from the three nights of spotlighting (as per Table 1). Figures 2-4 below show the investigation area and species records at a broader scale, and Figures 5-7 show the survey results from the individual spotlighting nights at a closer scale.

In total, 37 of the 40 (93%) Greater Gliders recorded across the three survey nights were located within areas scheduled for logging under VicForests TUP (Figure 2). All of the TUP coupes subject of this investigation are listed as Multi-Aged Stand Management coupes under the VicForests TUP (Figures 2-7). 20 of the 40 (50%) Greater Gliders recorded were located within designated Special Protection Zones (SPZs). Of the 20 Greater Gliders which were recorded within SPZs, 18 of these are located within a narrow linear strip of SPZ along Kangaroo Creek, approximately 200m wide (Figures 2, 5 & 6), and only 2 of the total 40 Greater Gliders (5%) are located within a nonlinear area of designated SPZ (Figures 2, 6 & 7). These Greater Gliders are 'SWA01GGV' (Figure 6) and 'MUD01GGV' (Figure 7), which were recorded on the very edge of larger patches of SPZ. 32 of the 40 Greater Gliders were recorded within 50m of watercourses (Figures 5-7), with the other 8 all occurring on the survey along Swaby Lane (Figure 6). These 8 Greater Gliders with the waypoint prefix 'SWA' were all located within 100m of watercourses (Figure 6).

Figure 3 maps the survey results from this investigation over existing records of Greater Gliders and Powerful Owls from both the Victorian Biodiversity Atlas (VBA) and the Wombat Forestcare Inc (WFC). These records from the WFC were previously analysed in a report from the VNPA titled 'Wombat Forest: A Greater Refuge for Gliders' (VNPA, 2020). Prior to this investigation there was only one record of Greater Glider from the VBA in these subject TUP coupes, being in coupe 208-503-0025 (Figure 3). There was also a cluster of Greater Glider records from the WFC across TUP coupes 208-502-0007 & 208-503-0027. The Greater Glider records from the VNPA subject of this report (Table 1, Figure 3) shows that the population occurs further upstream along Kangaroo Creek and Mudlark Creek than previously understood and expands further north along Swaby Lane.

Figure 4 shows that extensive logging operations have occurred in the 1990s and 2000s within the investigation area.

Figures 5-7 detail the high-density recordings of Greater Gliders across spotlighting survey transects. The densities of Greater Gliders recorded are summarised in Table 2 below:

Table 2. High density	recordings of	Greater Glider	records across	TUP coupes.

# Of Greater Gliders recorded	Distance between Greater Glider records (m)	Density of Greater Glider records (GGs per km)	Map Reference	TUP Coupes with high density of Greater Gliders
7	639	11	Figure 5	208-502-0007, 208-503-0029, 208-503- 0027
16	1869	8.6	Figure 5	208-502-0007, 208-503-0029, 208-503- 0027, 208-503-0028, 208-503-0030
9	858	10.5	Figure 5	208-503-0029, 208-503-0027, 208-503- 0028, 208-503-0030
8	1019	7.9	Figure 6	208-502-0006
9	933	9.6	Figure 6	208-502-0007
5	401	12.5	Figure 7	208-503-0025

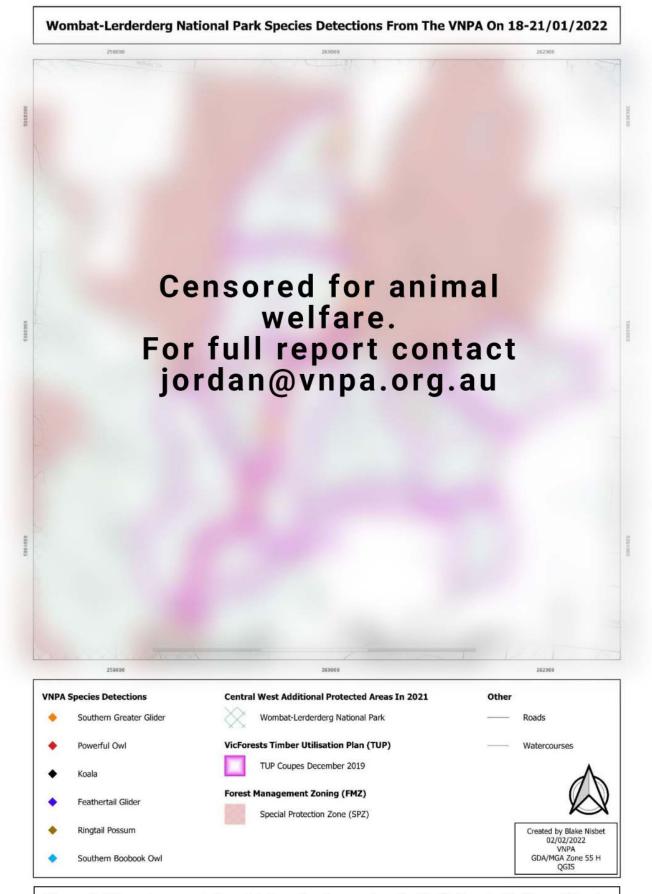


Figure 2. All species records from this investigation overlayed with VicForests Multi-aged Stand Management (MASM) TUP Coupes and the proposed Wombat-Lerderderg National Park.

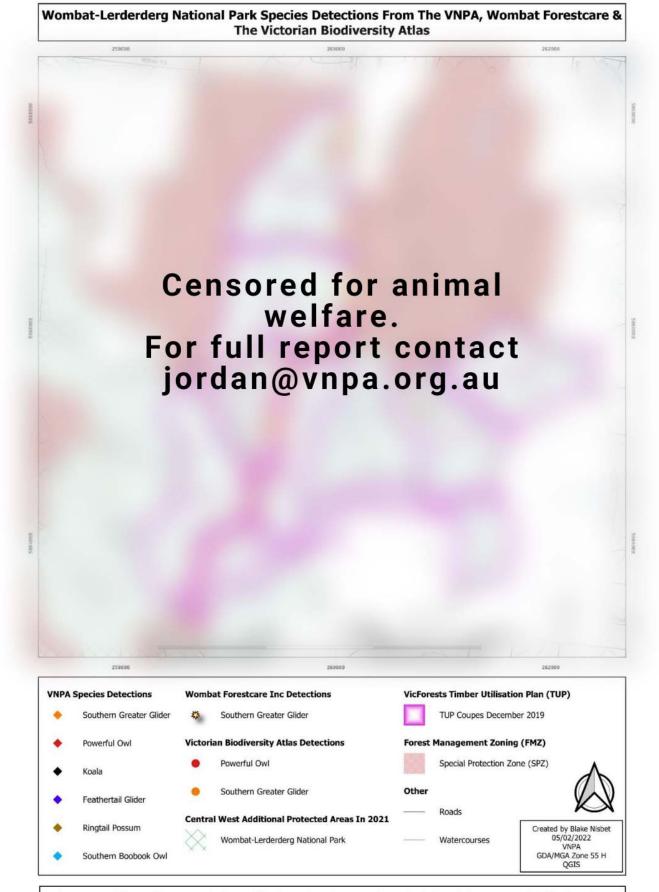


Figure 3. All species records from this investigation overlayed with existing Powerful Owl and Greater Glider records from the VBA and WFC.

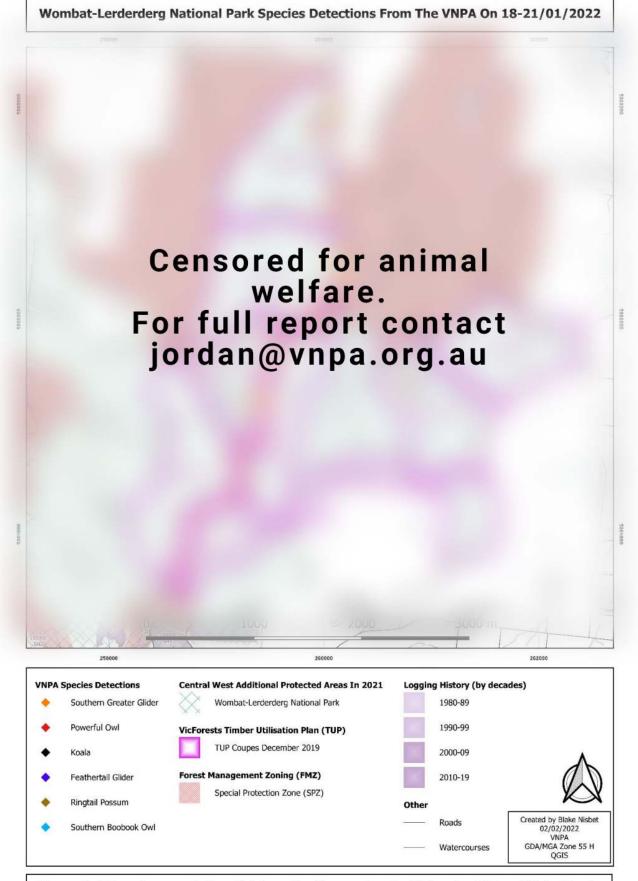


Figure 4. All species records from this investigation overlayed with logging history: Silvicultural systems used in this area include Shelterwood 1 and 2 (SH1, SH2), Seed Tree Retention (STR), Thinning from above and below (THA, THB).

Kangaroo Creek Species Detections From The VNPA On 18-19/01/2022 Censored for animal welfare. For full report contact jordan@vnpa.org.au Central West Additional Protected Areas In 2021 **VNPA Species Detections** Other Southern Greater Glider Wombat-Lerderderg National Park Contours Ringtail Possum VicForests Timber Utilisation Plan (TUP) High Density Recording TUP Coupes December 2019 Watercourses of Greater Gliders @8.6 GGs p/km High Density Recording Forest Management Zoning (FMZ) of Greater Gliders @10.5 GGs p/km Special Protection Zone (SPZ) High Density Recording of Greater Gliders @ 11 GGs p/km Created by Blake Nisber 02/02/2022 GDA/MGA Zone 55 H OGIS

Figure 5. Species records from the first night of spotlighting (18-19/01/2022) showing the highdensity recordings of Greater Gliders in the area.

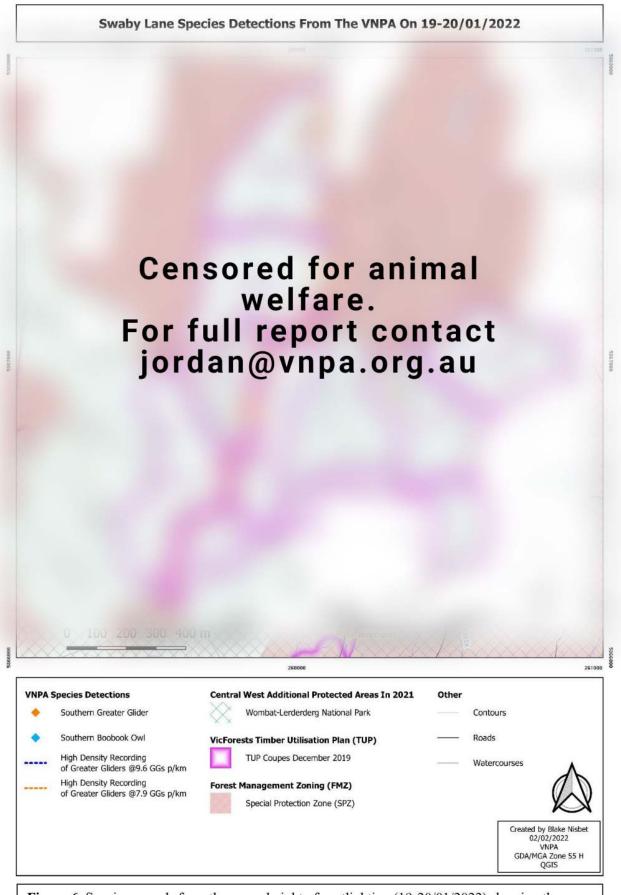


Figure 6. Species records from the second night of spotlighting (19-20/01/2022) showing the high-density recordings of Greater Gliders in the area.

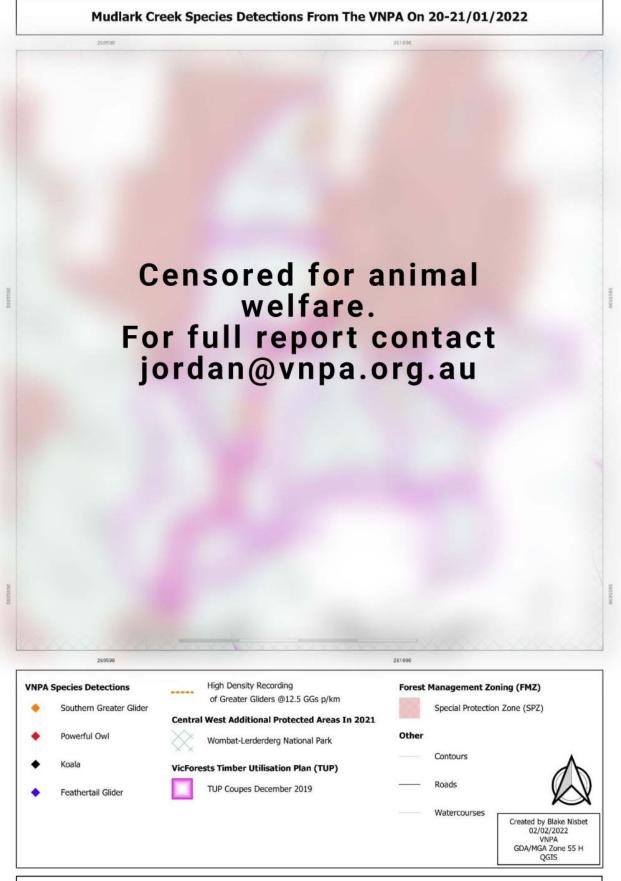


Figure 7. Species records from the third night of spotlighting (20-21/01/2022) showing the highdensity recordings of Greater Gliders in the area.

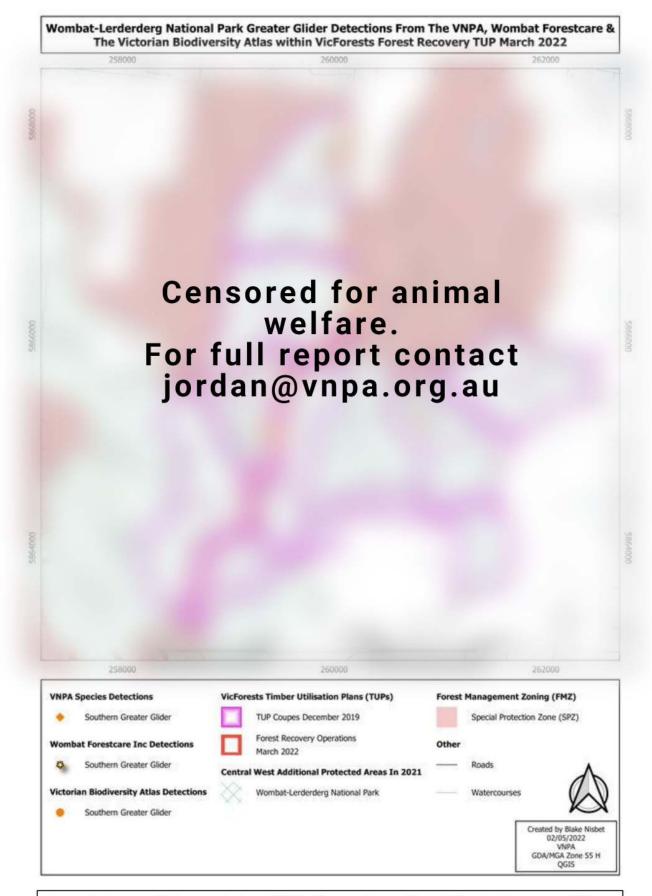


Figure 8. Greater Glider records from VNPA (Orange diamonds) and Wombat Forestcare (Yellow Stars), VBA (Orange dots) with Forest Restoration TUP and TUP prior to April 2022

Results. Logging & Storm Damage Photographs

Extensive storm damage was seen and documented during this investigation, with many large and mature trees having fallen from recent storm events. This storm damage has impacted the forest consistently throughout the forest landscape including in the gullies and creeklines where Greater Gliders were recorded.



Figure 9. Mature tree which has been uprooted and fallen from recent storm events.



Figure 10. Mature trees which have uprooted and fallen from recent storm events along Mudlark Creek in close proximity to the recording locations of Greater Gliders 'MUD02GGV' & 'MUD03GGV'.

Recent logging operations were recorded within the proposed Wombat-Lerderderg National Park during this investigation. Logging machinery was recorded parked within VicForests TUP coupe 208-503-0024 (Figure 10) and a pile of recently felled logs were recorded within the coupe at the log landing (Figure 11). Figure 11 also shows, in the background, that the coupe has been subject to a series of logging operations in recent years which has left the canopy opened up and sparse. Figure 4 highlights the location of coupe 208-503-0024 in which these observations occurred.



Figure 11. Logging machinery recorded within VicForests TUP coupe 208-503-0024.



Figure 12. Recently felled logs piled up within VicForests TUP coupe 208-503-0024.

Results. Attached Spatial Data and Video Evidence

Attached to this report is Figure 12 which contains a GPX file with all the waypoints recorded during this investigation (Table 1). Also attached is Figure 13, a link to a google drive containing all of the video evidence for the Greater Glider and Koala recordings from this investigation (Table 1).

Discussion

The Action Statement for the Greater Glider was released in November of 2019, and states that the Intended Management Actions for the species includes to (DELWP, 2019):

- 5) Retain at least 40% of the basal area of eucalypts across each timber harvesting coupe, prioritising live, hollow bearing trees, wherever a density of Greater Gliders equal to or greater than five individuals per spotlight kilometre (or equivalent measure) is identified... (VicForests Responsibility)
- 8) Ensure the necessary information on distribution, abundance, habitat preferences and habitat management (including old growth forest) is collected to identify near- and longerterm importance of areas for a range of forest-dependent species, including the Greater Glider, and use this information to inform planning for any new park and/or reserve system to protect forest-dwelling species as part of the modernisation of Victoria's Regional Forest Agreements. (DELWPs Responsibility)

Table 2 and Figures 5-7 demonstrate that a Greater Glider density equal to or greater than five individuals per spotlight kilometre was recorded during this investigation across the following TUP coupes (*The Coupes*):

208-502-0006, 208-502-0007, 208-503-0025, 208-503-0029, 208-503-0027, 208-503-0028, 208-503-0030

VicForests must therefore retain at least 40% of the Eucalypt basal area across *The Coupes* as per the Action Statement management action (DELWP, 2019). Figure 4 shows that in some of *The Coupes*, particularly those subject to intensive Shelterwood (SH) or Seed Tree Retention (STR) harvesting, harvesting events in recent decades have likely already removed over 60% of the Eucalypt basal area. This has likely caused Greater Glider populations to be heavily restricted to gullies and creeklines which have acted as a refuge from logging and/or fires. Further information and scientific references on the impacts of logging on Greater Glider populations in the Wombat Forest are detailed in the VNPA report 'Wombat Forest: A Greater Refuge for Gliders' (VNPA, 2020).

It's recommended that no further logging should take place in *The Coupes* as to allow for the recovery of the forests surrounding these gullies and the development of suitable hollow-bearing trees to allow for Greater Glider dispersal throughout the landscape. The importance of this is substantiated by the additional pressures from recent storm events which have taken out many of the mature Eucalypt trees in this investigation area (Figures 8-9). The complete protection of *The Coupes* is consistent with Management Action 8 above (DELWP, 2019) which is the responsibility of DELWP, which states that the necessary information on distribution, abundance, habitat preferences and habitat management should be collected and used to inform planning for any new park and/or reserve system. The necessary information on Greater Glider distribution, abundance and habitat preferences across *The Coupes* had not been documented within the VBA prior to the announcement of the proposed Wombat-Lerderderg National Park (Figure 3), and so the planning and management of the new National Park had not taken into consideration such information. The importance of this area to the Greater Glider is significant and logging should not be permitted within this section of the proposed Wombat-Lerderderg National Park prior to reaching its status of National Park protection.

Conclusions and Recommendations

Surveys from the VNPA between 18-21 January 2021 have recorded 40 Greater Gliders across an area of the proposed Wombat-Lerderderg National Park which is largely scheduled for logging on VicForests TUP. Powerful Owl and Koalas were amongst other species which were recorded throughout this investigation. The high densities of Greater Gliders recorded across 7 TUP coupes (*The Coupes*) trigger the protective prescription in the Greater Glider Action Statement which requires VicForests to retain at least 40% of the basal area of Eucalypts in these coupes.

Timber harvesting events in recent decades have likely exceeded the removal of 60% basal area of Eucalypts in some of *The Coupes*, causing the Greater Glider distribution to be heavily restricted to gullies and creeklines which have acted as a refuge from logging and/or fires. The added pressures of recent storm damage are further threatening these Greater Glider populations. The full protection of this investigation area is recommended to allow for the recovery of the forest surrounding the gullies and creeklines, the development of suitable hollow-bearing trees and to allow for dispersal of Greater Gliders into the surrounding forest into the future.

The increase in logging intensity within the Wombat Forest by the implementation of the Forest Recovery TUP (April 2022) will see approx. 4,000ha of new logging coupes within the forest and will cause the loss of hollow bearing trees as well as damage to corridors used by the Greater Gliders to move through the landscape, essentially cutting off any chance of dispersal across the landscape by the animals. It is under clear if DELWP/OCR have provided advice to VicForest on the nature of these new operations and the placement of logging coupes within Heritage River areas and Special Protection Zones.

DELWP must, as a minimum:

- a) Ensure that VicForests retains at least 40% of the Eucalypt basal area in *The Coupes* as per the Greater Glider Action Statement
- b) Ensure that VicForests retains all live and dead, hollow-bearing trees in all TUP coupes
- c) Ensure VicForest not operate machinery within the Tree Protection Zone (12xdbh of the tree) of remaining trees
- d) Ensure VicForest avoids areas of high densities of hollow bearing trees and gullies.

We recommend that DELWP:

- e) Restrains VicForests from undertaking any further logging operations in any of the TUP coupes within this investigation area, namely 208-502-0006, 208-502-0007, 208-503-0025, 208-503-0029, 208-503-0027, 208-503-0028, 208-503-0030, 208-503-0024, 208-503-0026, providing immediate and full protection to this area which is significant habitat for the threatened Greater Glider
- f) Restrains VicForests from undertaking any further logging operations in any of the TUP coupes which were found to contain high densities of Greater Glider (*The Coupes*)
- g) Conducts ecological surveys in any other TUP coupes within the proposed Wombat-Lerderderg National Park to collect information on the distribution, abundance, habitat preferences and habitat management of forest dependent species such as the Greater Glider prior to any timber harvesting operations
- h) DELWP remove all Forest Recovery TUP logging coupes from Heritage River areas and Special Protection Zones (SPZs)
- i) DELWP manage the Wombat Forest in an appropriate manner in line with the accepted VEAC Recommendations by the government from 2021.

References

Department of Environment, Land, Water and Planning (DELWP). (2019). Greater Glider (Petauroides volans subsp. volans) Action Statement No. 267: Flora and Fauna Guarantee Act 1988, viewed 13 Feb 2022,

 $< https://www.environment.vic.gov.au/__data/assets/pdf_file/0019/440371/267-Greater-Glider-2019-Action-Statement.pdf>$

Victorian National Parks Association (VNPA). (2020). Wombat Forest: A Greater Refuge For Gliders. Significance of Wombat Forest Greater Gliders 2020, viewed 13 Feb 2022, < Wombat-Forest-A-greater-Refuge-for-Greater-Gliders.pdf (vnpa.org.au)>