

# **Goongerah Environment Centre Survey Report**

## **Greater Glider (*Petauroides volans*) detections in**

### **VicForests logging coupe 893-504-0009 ‘Autumn Sweet’**

#### **Playgrounds Quarry Road – Bendoc State Forest – East Gippsland**

#### **Abstract:**

Forest areas within VicForests logging coupe 893-504-0009 ‘Autumn Sweet’ were surveyed to assess the presence of nocturnal fauna. 5 Greater Gliders were detected in nocturnal spotlight surveys on 22 March 2021. Also included in this report is a Greater Glider detected on 3 February 2021 within adjacent logging coupe 893-505-0003 ‘Arena’, labelled in Figure 1 below as PLYGRNDGG02 (03/02/21).

Spatial analysis of the Greater Glider records obtained during the survey conducted on 22 March 2021 were assessed using Geographic Information System software showing 3 Greater Gliders detected were found to be located within a 1 ha area polygon.

The detections also represent a substantial population of Greater Gliders located in isolated habitat. Protection is therefore required under the relevant mandatory biodiversity conservation measures set out in the regulatory framework governing logging operations in Victoria's State Forests. The methodology, results, and recommendations arising from this survey are further detailed within this report.

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#### **Date of survey**

22 March 2021

#### **Date of report**

26 March 2021

## Method: Nocturnal Fauna Spotlight Survey conducted 22 March 2021

### Equipment Used

Hand-held Spotlights

Global Positioning System (GPS) [Garmin GPSMAP 64s]

### Method used

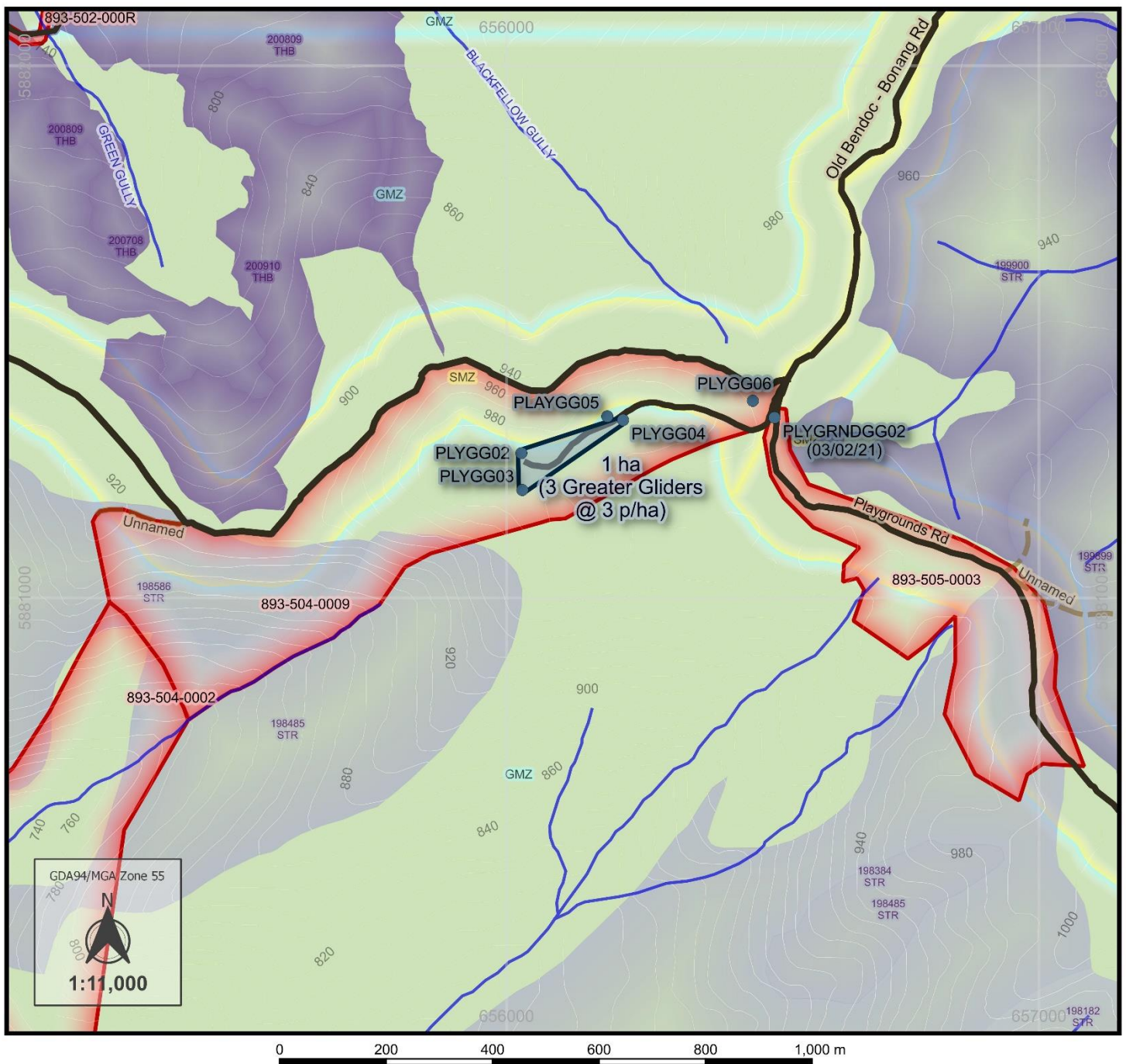
1. On 22 March at around 9:15pm surveyors commenced a spotlighting survey along Playgrounds Quarry Road in Bendoc State Forest and forest areas within VicForests logging coupe 893-504-0009 'Autumn Sweet'.
2. The survey involved shining a hand-held spotlight into the canopy of trees to search for the presence of nocturnal fauna.
3. As fauna were identified the location of the fauna species was marked with the GPS.
4. The results of this survey and the locations of the Greater Gliders observed are shown in Table 1 and accompanying map (Figure 1) below.
5. Fauna record location data was analysed using Geographic Information Systems (GIS) mapping software to determine compliance requirements with the regulatory framework governing logging operations in Victoria's State Forest with respect to fauna detection-based biodiversity conservation measures.

## Results

Table 1: Results of nocturnal survey conducted on 22 March 2021, including the Greater Glider detected on 3 February

Date	Time	Waypoint ID	Species	Type	Bearing	Distance	Location (GDA94)
03/02/21	00:14:25	PLYGRNDGG02	Greater Glider	Visual	280	10	55 H 656513 5881337
22/03/21	21:34:57	PLYGG02	Greater Glider	Visual	320	30	55 H 656047 5881249
22/03/21	21:46:04	PLYGG03	Greater Glider	Visual	210	35	55 H 656047 5881233
22/03/21	21:59:36	PLYGG04	Greater Glider	Visual	80	18	55 H 656201 5881331
22/03/21	22:02:39	PLAYGG05	Greater Glider	Visual	20	15	55 H 656184 5881327
22/03/21	22:39:31	PLYGG06	Greater Glider	Visual	340	10	55 H 656466 5881361

**Figure 1: Map of fauna detections observed and recorded in Bendoc State Forest on 3 February and 22 March 2021**



**Current Investigation**

- Greater Glider locations
- High Density Greater Glider area

**Logging and disturbance**

- Scheduled Logging Coupes (VicForests, December 2020)
- Logging History (High Severity, LOGSEASON)
  - 198182
  - 199900
  - 200910

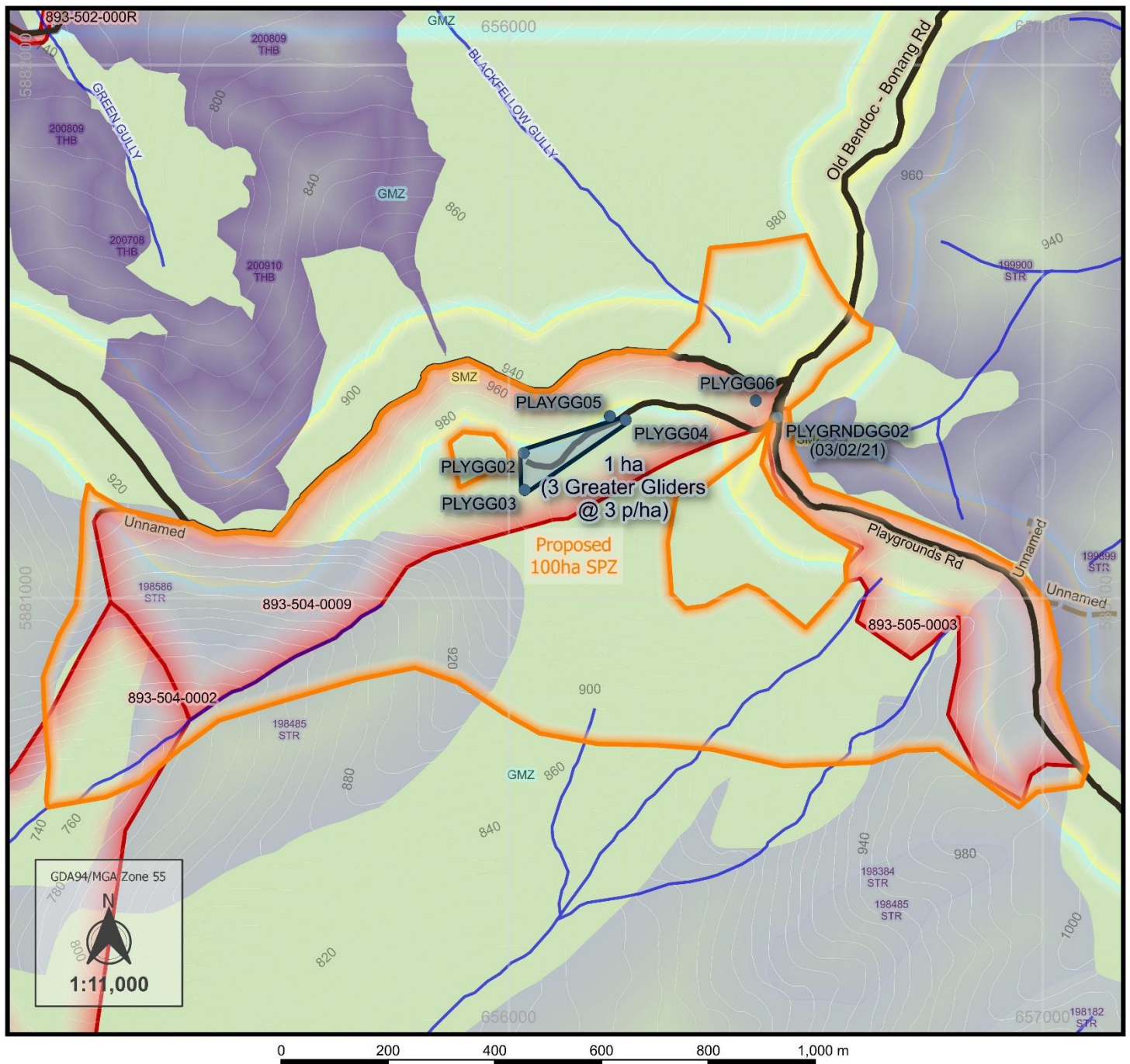
**Forest Management Zones**

- Special Management Zone
- General Management Zone
- State Forest (all FMZs)

**Roads**

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- 
- Watercourses**
- Contours

**Figure 2: Proposed 100ha Greater Glider Special Protection Zone**



**Current Investigation**

- Greater Glider locations
- High Density Greater Glider area
- Proposed 100ha Greater Glider Special Protection Zone

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## Excerpts from relevant legislation

1. "Planning Standards for timber harvesting operations in Victoria's State forests 2014, Appendix 5 to the Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2014", Department of Environment and Primary Industries, The State of Victoria, 2014 (Planning Standards)

Excerpt from table 4, page 43:

East Gippsland	Greater Glider	<i>Petauroides volans</i>	Establish a SPZ of approximately 100 ha of suitable habitat where verified records report more than 2 individuals per hectare, more than 10 individuals per km or more than 15 individuals per hour of spotlighting, or where substantial populations are located in isolated or unusual habitat.
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2. Forest Management Plan For The East Gippsland Forest Management Area, Victoria Department of Conservation and Natural Resources, East Melbourne, December 1995 (EG FMP)

Excerpt from page 30:

### CONSERVATION GUIDELINE continued

**Arboreal mammals.** For each of the following occurrences, approximately 100 ha of suitable habitat will be included in the SPZ:

- resident Koala populations.
- Greater Glider and Common Brushtail Possum - >2 individuals per ha, >10 per km, or >15 per hour of spotlighting.
- Yellow-bellied Glider - >0.2 per ha, >5 per km, or >7 per hour of spotlighting.
- Eastern Pygmy Possum - >5 per standard pitfall line over 5 days.
- substantial populations of the above species that are isolated or in unusual habitat.

**Rich mammal sites.** Well-documented sites that are particularly rich in mammal species will be included in the SPZ or SMZ wherever practical.

## Summary/Conclusions

Presence of Greater Glider (*Petauroides volans*) at more than 2 individuals per hectare

1. Within VicForests logging coupe 893-504-0009 'Autumn Sweet', Greater Glider observations were made during the nocturnal fauna survey described above. The recording locations of the five Greater Glider individuals detailed at Table 1 above are shown as grey dots in Figure 1. **Three Greater Gliders located within a 1 hectare area polygon were found during the survey on the night of 22 March 2021.**
  2. Both the "Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2014", Department of Environment and Primary Industries, The State of Victoria, 2014 through its "Planning Standards", and the EG FMP For The East Gippsland Forest Management Area, Victoria Department of Conservation and Natural Resources, East Melbourne, December 1995 **require that an SPZ (Special Protection Zone) of approximately 100ha of suitable habitat be established where more than 2 Greater Glider individuals per hectare are recorded.**
  3. We have provided a map with the recommended SPZ to include suitable habitat, and the Greater Glider detected on 3 February in adjacent logging coupe 893-505-0003 'Arena'. The proposed SPZ represents the best suitable habitat in the surrounding area for the gliders detected in both 'Autumn Sweet' and 'Arena' (see Figure 2).
  4. Further, both the Planning Standards and the East Gippsland FMP require (as an additional basis to the 'more than 2 individuals per hectare' criteria for protection) that a SPZ of approximately 100ha of suitable habitat be created where substantial populations are located in isolated or unusual habitat. The habitat within and adjacent to Autumn Sweet coupe is "isolated" because it is surrounded by sizable areas of clear-felled land which is not suitable Greater Glider habitat.
- The detections recorded during the survey on 22 March 2021 represent a "substantial population" including because a high density of Greater Gliders was recorded, indicating a large population of the species exists in and around Autumn Sweet coupe, and the unburnt habitat at the coupe is a refuge area following the extensive 2019/2020 bushfires in East Gippsland.
5. **To meet the requirements of the Greater Glider prescriptions contained within the regulatory framework governing logging operations in Victoria's State Forests a 100ha Special Protection Zone must be established and fully implemented by the Department of Environment, Land, Water and Planning responsive to the Greater Glider detections detailed within this report.**

