



23 January 2018

TF & A Millett  
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**Attention:** David Sammut (General Manager - Land Development) Phone 9971 6300

**By Email** – [david.sammut@udmgt.com.au](mailto:david.sammut@udmgt.com.au)

Dear David,

**RE: ROSENTHAL ESTATE: 100 VINEYARD ROAD, SUNBURY  
GOLDEN SUN MOTH MONITORING SURVEYS  
BL&A PROJECT NO. 15148.1**

### **Introduction and summary**

This letter provides the results of recent Golden Sun Moth (GSM) monitoring surveys within the conservation reserves at the Rosenthal Estate located at 100 Vineyard Road, Sunbury. These surveys are required under the Council endorsed Conservation Management Plan (EHP 2015).

Four surveys were undertaken at the site in late 2017 and early 2018. Details of each survey are presented in the table below. There were no confirmed sightings of GSM.

### **Method**

#### Survey Guidelines

Golden Sun Moth (GSM) surveys were required within the subject property to assist in determining the status of GSM within the study area for the subject project. The methods for undertaking the survey followed DELWP guidelines (DSE 2010) and these are outlined below:

- GSM surveys must be timed to coincide with the Moth's active season, i.e. December. In some wet years the season may be extended to January.
- Surveys must only be undertaken during suitable weather conditions, namely:
  - Warm to hot days (days above 20°C by 10 am);
  - During the warmest part of the day;
  - Clear to mostly cloudless sky;
  - Still or relatively still wind conditions during the survey period; and
  - At least two days since rain.
- Surveys must be undertaken when male moths are known to be flying. This will be determined by visiting a reference site supporting a known moth population close

to the study area prior to undertaking the survey, and/or by liaison with DELWP or other consultants.

- Surveys will occur between 10 am and 3 pm on suitable days unless moths are still observed flying. In such circumstances the surveys will continue until no more moths are observed flying.
- Transect locations will be recorded using a hand-held GPS.
- The aim of the surveys will be to record the moth if it is present. As per the guidelines this is achieved by undertaking a total of up to four surveys in areas of suitable habitat. Every GSM record will be logged on a hand-held GPS for mapping.
- Each survey will involve up to four site visits where transects of decreasing width will be walked. On the first visit transects will be spaced at 50m, on the second at 25m and on the third and final visits at 10m. Surveying can cease once moths are observed and an adequate estimate of numbers is obtained (i.e. not all survey days may be required).

## Results

Table 1: GSM survey results

Date	30/11/2017	12/12/2017	5/1/2018	18/12/2017
Site location (coordinates)	100 Vineyard Rd, Sunbury (-37.589763, 144.705492)			
Survey type	50m Transect survey	25m Transect survey	10m Transect survey	10m Transect survey
Reference site validating survey	O'Herns Rd, Epping, east side of Hume Highway (37° 37'58.80"S, 144° 59'14.29"E)		O'Herns Rd, Epping, east side of Hume Highway (37° 37'58.80"S, 144° 59'14.29"E)	
Survey start time	10:30am	10:15	11:30	14:30
Survey duration	2 hrs	2.75 hrs	2.25 hrs	1 hr
GSM recorded?	No		No	
Time of sighting	NA	NA	NA	NA
Total Number GSM	NA	NA	NA	NA
Temp on site (°C)	32 to 37	21 to 23	26 to 32	35 to 38
Cloud cover %	30	10	10	20-30
Wind direction	NE	S	SE	SE
Average Wind strength	Fresh	Gentle	Gentle	Gentle
Ground conditions (dry/damp/wet)	Dry			
Humidity	Unknown			

<b>Vegetation description</b>	Chilean Needle-grass	Chilean Needle-grass, Austrostipa sp., Perennial Rye-grass, 0-5% bare ground
<b>Behaviour (eg were they seen on the ground or in/flying over vegetation)</b>	NA	NA
<b>Other notes</b>	GSM confirmed in good numbers at reference site, but not in the study area	GSM confirmed in good numbers at reference site, but not in the study area

### Conclusion

As can be seen from the table above, no GSM were recorded within the study area this season.

Given that GSM have been recorded at this site previously, management of the conservation reserves should continue in accordance with the Council endorsed Conservation Management Plan (EHP 2015) as if the species is present.

As an adaptive management approach is being taken, further monitoring may identify a need to change the prescribed management of the site.

If you have any questions regarding the above, please do not hesitate to call me.

Yours sincerely,



**Alan Brennan**

**Senior Ecologist & Project Manager**

**BL&A**