

Brett Lane & Associates Pty. Ltd. Ecological Research & Management

10 January 2011

Tom Milinkovic Keith Altmann & Associates PO Box 351 Sunbury 3429

Dear Tom,

# RE: 100 VINEYARD ROAD, SUNBURY SUITABILITY OF HABITAT FOR GRASSLAND EARLESS DRAGON BL&A REFERENCE 10163.1

Brett Land & Associates was commissioned to undertake an evaluation of habitat at 100 Vineyard Road, Sunbury in regards to suitability for the Grassland Earless Dragon (*Tympanocryptis pinguicolla*).

# Methodology

The study area was inspected on the 16<sup>th</sup> December, 2010. A walkover of the study site was undertaken to identify any areas of suitable habitat for the Grassland Earless Dragon within the areas previously designated as remnant patch indigenous vegetation. The habitat zones inspected were PG1a, PG1b, and both sections of PG4 as shown in Map 1.0 in GAGIN (2010). Conditions were deemed suitable to detect this species.

# **Grassland Earless Dragon**

The Grassland Earless Dragon has small, rough scales and well-developed limbs. They are often fast moving. The ear opening is covered by skin. It is about 150 mm from nose to tail tip and is mottled light grey and brown in colour with three pale longitudinal stripes. The under-surface is white, sometimes with fine dark speckling, and there is occasionally a yellow flush on the chin and neck. There is a short row of small spines on the nape of the neck (DSE 2008).

In southern Victoria, the dragon inhabits rocky native grasslands with sparse or absent tree and shrub cover; usually in uncultivated paddocks in farmland with little or no grazing. The distribution within sites is patchy and the subtle requirements of the species are not well understood. The dragons shelter in invertebrate burrows or under surface rocks, allowing them to survive in some sites with degraded native grasslands (DSE 2008).

The Grassland Earless Dragon has been recorded from NSW, the ACT and Victoria. In Victoria, the species occurred on the basalt plains north of Melbourne, west around Geelong and in central Victoria. There were five sightings of the Grassland Earless Dragon in Victoria between 1988 and 1990; one at Merri Creek north of Donnybrook, one at Jackson Creek at Holden Flora Reserve, and three sightings at the Little River Gorge, west of Werribee. Intensive surveys at these sites since 1994 failed to detect



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the lizard (DSE 2008). Recent information indicates that it has disappeared from Victoria.

Threats to the dragon include habitat loss and fragmentation, degradation of habitats by a range of processes including, changed fire regimes, changed grazing regimes, introduction of pasture species, weed invasion, rock removal and the impacts of introduced animals (Robertson & Cooper 2000).

#### Results

The study area for this investigation lacked any records of the species. The AVW contained a 1990 record from an area approximately 4.5 km to the south east.

The study area is made up of Plains Grassland dominated by Spear Grass together with Wallaby Grass with smaller patches of Kangaroo Grass. The quality of the habitat zones examined was variable depending on the presence of weeds and level of disturbance. The habitat present in the study area contained a few of the habitat requirements of the earless dragon, including the dominant native grassland cover, lack of trees or shrubs, low grazing level and little disturbance. However, it lacked surface rock, visible invertebrate burrows, soil cracks and in parts supported an abundance of weeds. The rocks present were mostly large imbedded rocks not usually suitable as shelter for the dragons.

The study area was surrounded by housing development on three sides, cultivated paddocks to the south and major roads separating it from other native grassland remnants in the region. The study area, therefore, had very poor connectivity with other possible populations in the region.

The study area is highly unlikely to provide habitat for the threatened Grassland Earless Dragon for the following reasons:

- Lack of important habitat elements of the species from the study area; •
- Poor connectivity with other possible habitat in the region, or other possible ٠ populations of the dragon in the region;
- Fragmentation of the habitat within the study area:
- Predation by foxes and cats cats are particularly important as the study . area was closely surrounded by houses.
- Lack of recent records from the region, the latest known record is dated back to 1990, and since then no more dragons were recorded from the volcanic plains north of Melbourne (AVW records).

# Conclusion

The Grassland Earless Dragon was not recorded in the native grassland habitat present in the study area and is highly unlikely to occur there. Consequently, there no implications under the Federal EPBC Act or the Victorian FFG Act.

Yours sincerely.

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# REFERENCES

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