

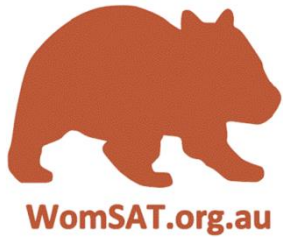


WOMBAT ROAD COLLISIONS

(An assessment based on WomSAT database)

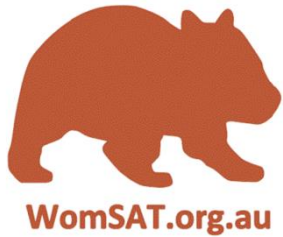
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School of Science and Health





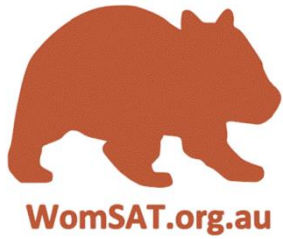
Introduction

- Each year in Australia many thousands of collisions occur between motor vehicles and animals, resulting in considerable vehicle repair costs, injury to persons, and loss of animal life (Rowden *et al.*, 2008).
- In every state there has been an increase in the number of motor vehicles (Australian Bureau of Statistics, 2018).
- As such, it is expected that the situation of wildlife being threatened by the transportation system will worsen.
- Wombats are now ranked third by motorists as the most accidentally struck animal (NRMA, 2018).



Introduction cont...

- Bare-nosed wombats (*Vombatus ursinus*) are considered both widespread and abundant.
- Bare-nosed wombats live in disturbed habitats; environments often beside roads (Buchan and Goldney 1988).
- As well as impacts from disease and predation by introduced species, high roadside fatality rates on many rural roads are frequently reported (Roger *et al.*, 2011).
- Mitigating road-kill is the most effective management solution (Roger *et al.*, 2011).
- Citizen scientists have recently been involved in many wildlife road mortality projects



Introduction cont...



Record Wombats in your local area



Help map Wombats in your local area

WomSAT is a new resource for communities to record sightings of wombats across the country. Australia's unique wombats are in crisis - Their numbers are declining and your help is needed to protect them by recording where you see wombats and their burrows in your local area.

Recording wombat sightings is very easy!

[Find out more >](#)



Where is William?

Northern Hairy-nosed Wombats (NHNWs) are critically endangered and one of the rarest mammals in the world. The small community of Thallon, in outback Queensland, hopes to raise its profile and with The Wombat Foundation, that of NHNWs with a giant wombat sculpture called 'William'. William is being made at Natureworks, in Brisbane, and will be travelling to Thallon on the 19th October. WomSAT will be following William Wombat's route home, so that everyone can track his progress on his journey.

START MAPPING HERE

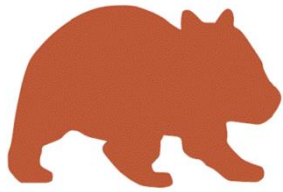
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WomSAT - Wombat Survey and Analysis Tools

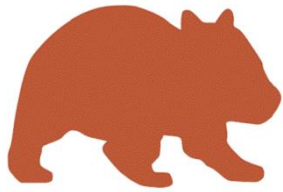
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Objectives

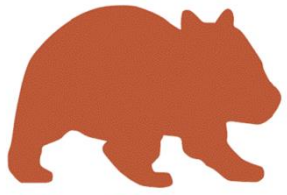
- Find out the distribution of wombat road collision
- Find out the relationship between wombat road mortality, gender, mange condition, time of the year
- Determine which landscape and climatic characteristics are associated with the distribution of wombat road mortality



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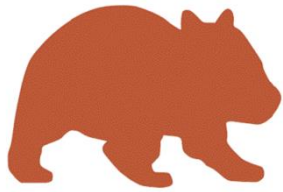
Methodology

- WomSAT sightings were mapped using ESRI ArcGIS
- Data is being analysed using Microsoft Excel and ArcGIS



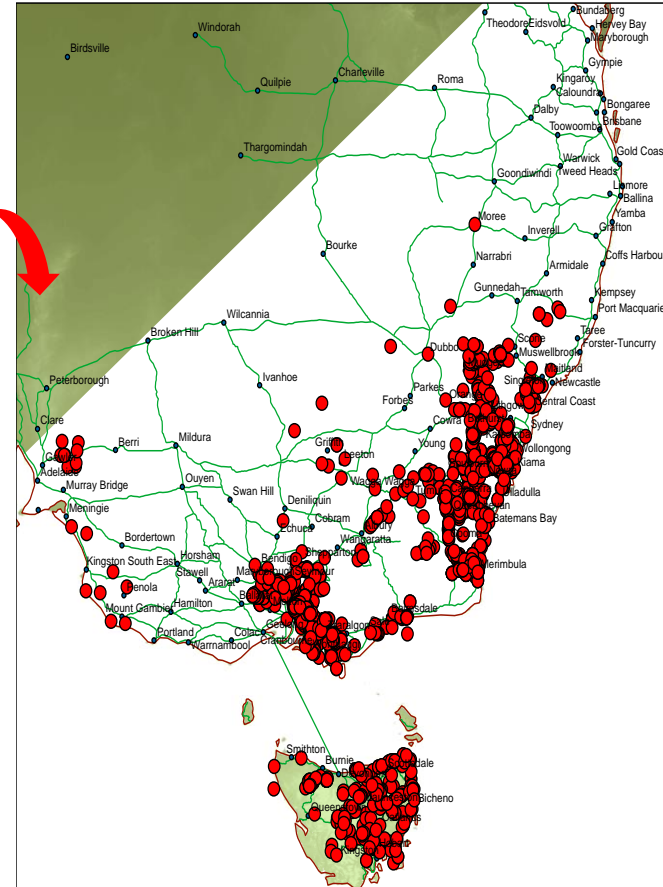
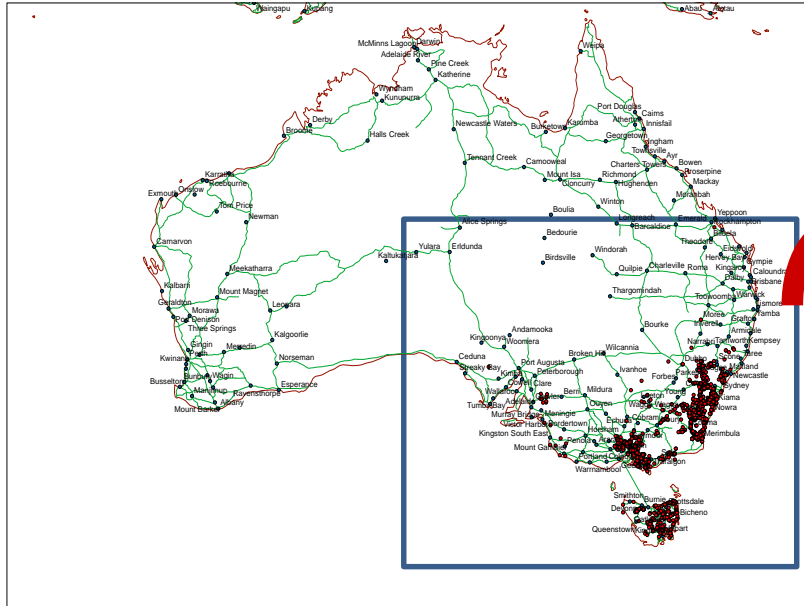
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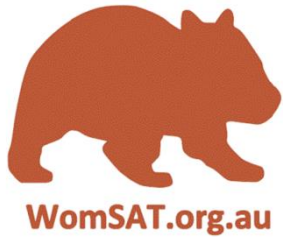
Results



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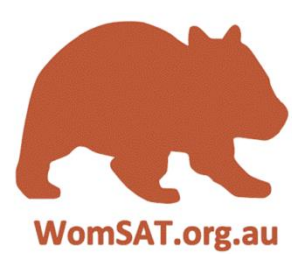
WomSAT Sightings





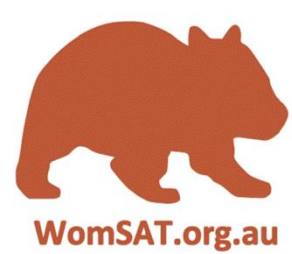
Conclusions

- Healthy wombats are the frequent victim of vehicle collisions
- Wombats hit by vehicles and killed year round
- There may be a seasonal pattern of wombat-vehicle-collisions since more incidents occur during winter to early spring



References

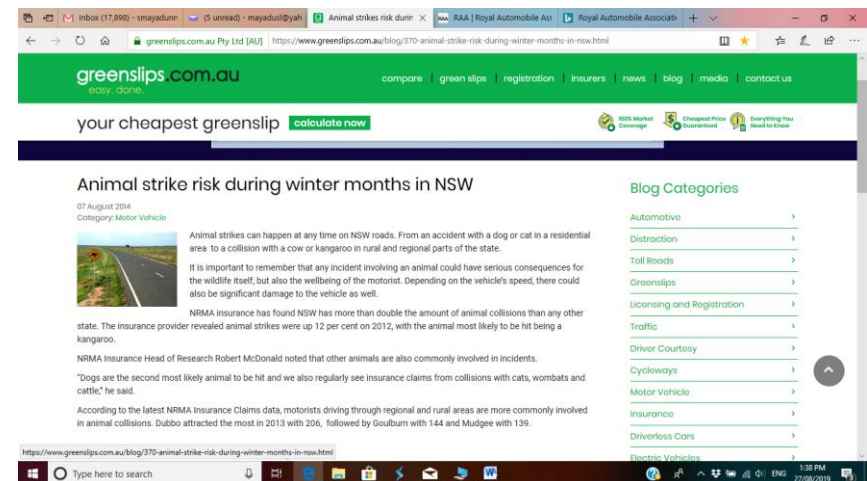
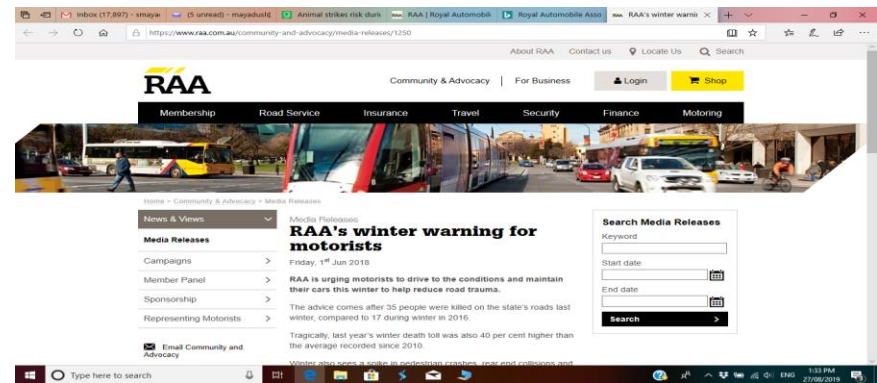
- Buchan A, Goldney D. C. (1998) The common wombat *Vombatus ursinus* in a fragmented landscape. In: Wells R T, Pridmore P A (eds) *Wombats*. Surrey Beatty & Sons, Chipping Norton, New South Wales, pp 251-261.
- NRMA. (2018). Road roos a risk this long weekend. NRMA Media release retrieved on 18th September 2018. <https://www.nrma.com.au/road-roos-risk-winter>
- Roger, E., Laffan, S.W & Ramp, D. 2011. *Popul Ecol.* (2011) 53: 215. <https://doi.org/10.1007/s10144-010-0209-6>
- Rowden, Peter J. and Steinhardt, Dale A. and Sheehan, Mary C. (2008). Road crashes involving animals in Australia. *Accident Analysis and Prevention* 40(6):pp. 1865-1871. QUT Digital Repository: *Professional Experience Unit, Faculty of Education, QUT*, 7, 290–305. <https://doi.org/10.1016/j.tsf.2010.01.037.Thin>



Acknowledgements



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- Marie Wynan and Ray Wynan



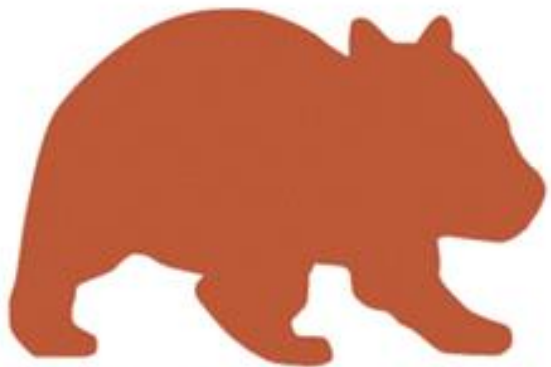


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A Community Driven Wombat
Conservation Program.

*Become a
Wombat Warrior
Today!*

Questions?



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