

Are my tortoises hot enough?

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- The thermal environment is a vital part of life for reptiles
- Zoos need to ensure each animals thermic needs are met
- Inadequate heat provision can result in health issues

Aim

- Does an increase in heat provision affect radiated tortoise temperature and behaviour?



Radiated tortoises



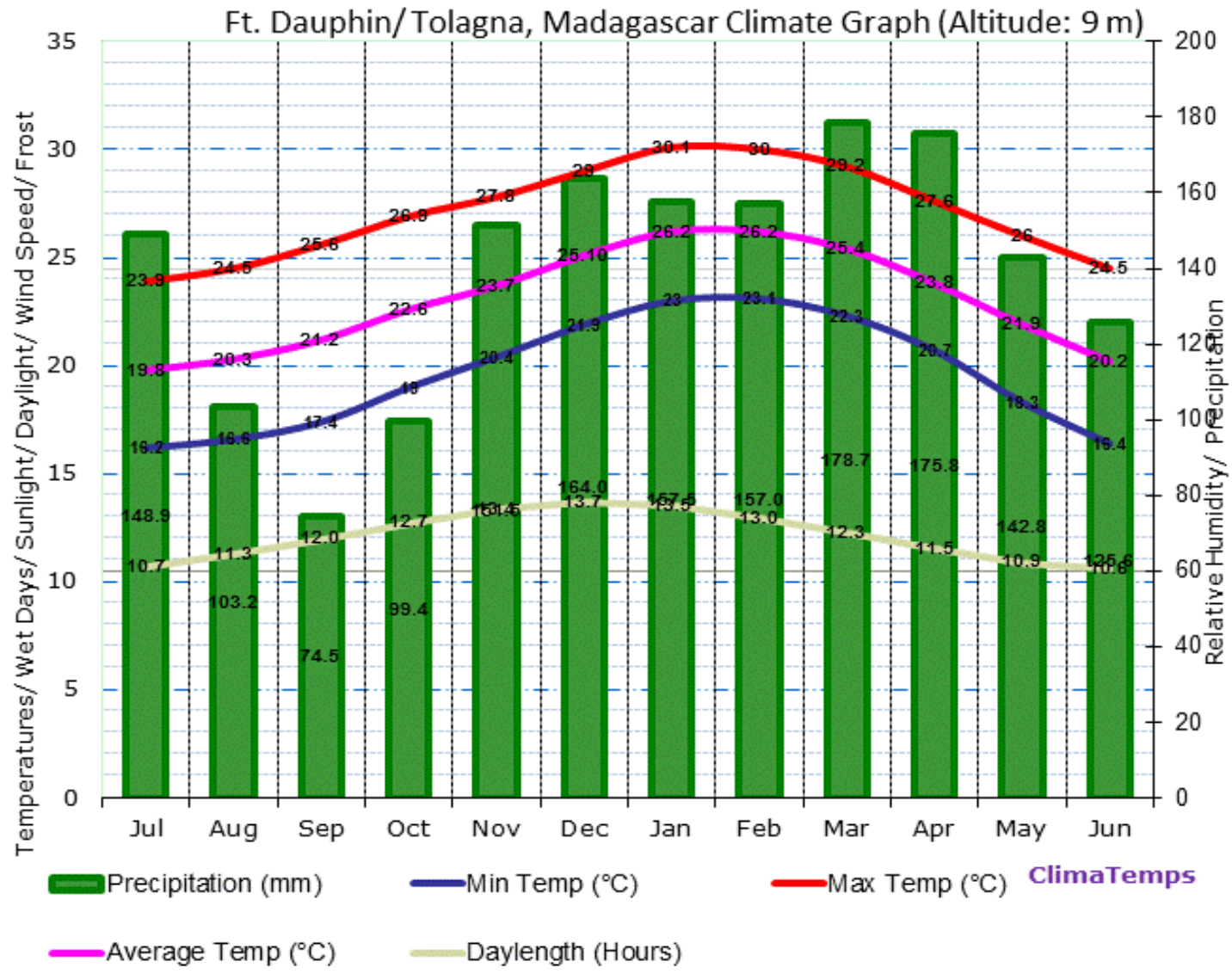
Astrochelys radiata

<http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T9014A12950491.en>

Scope: Global
Language: English
[Download assessment](#)

NOT EVALUATED	DATA DEFICIENT	LEAST CONCERN	NEAR THREATENED	VULNERABLE	ENDANGERED	< CRITICALLY ENDANGERED >	EXTINCT IN THE WILD	EXTINCT
NE	DD	LC	NT	VU	EN	CR	EW	EX

Radiated tortoises

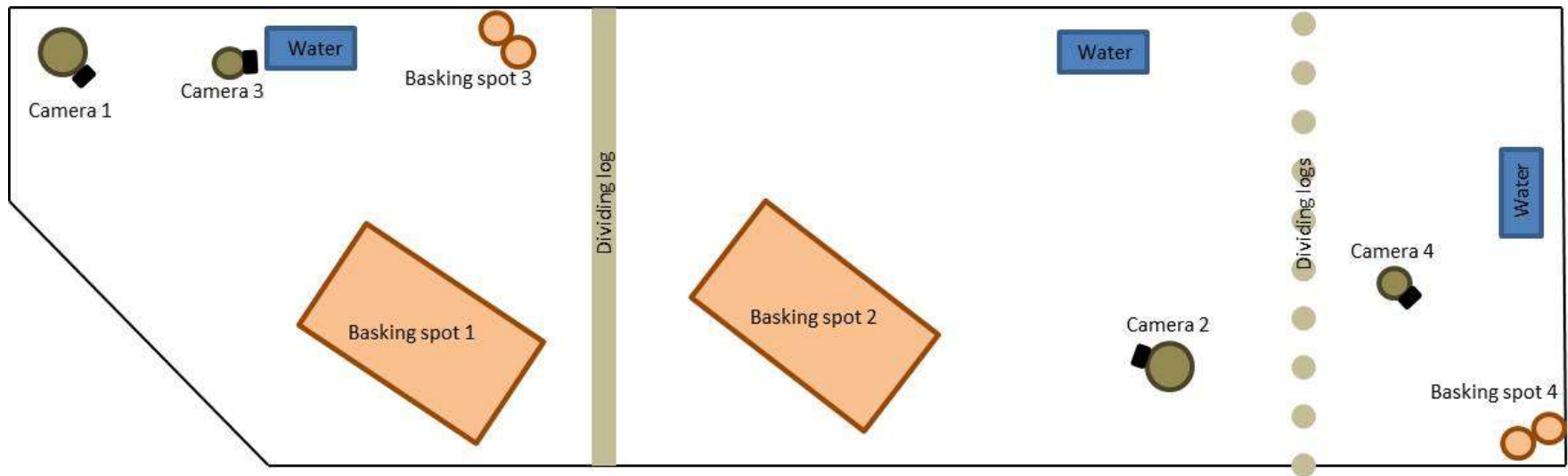


- Behaviour data
 - Tortoises numbered for ID
 - 3 photos every 5 mins, 8am-6pm
- Temperature data
 - 2 iButtons per tortoise
 - 2 in basking spots, 2 in shaded areas



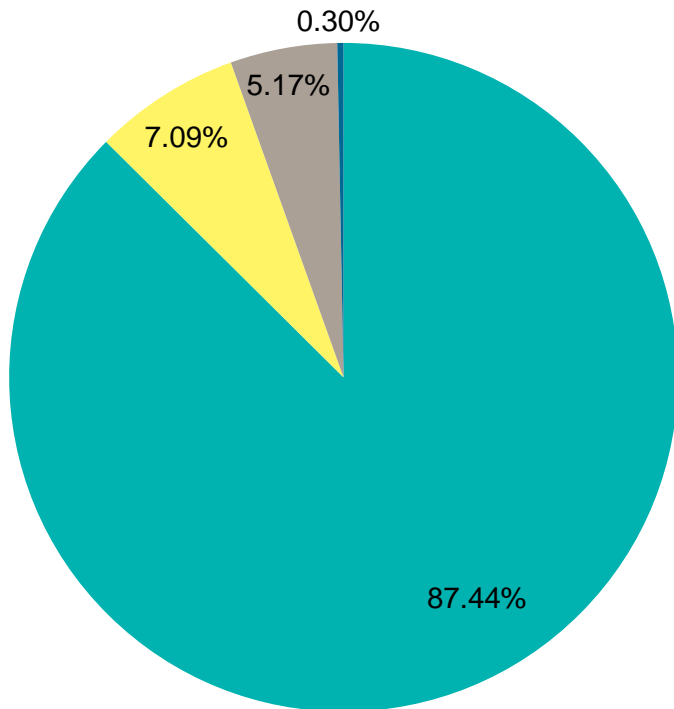
Enclosure 1

Pre-move data collected November 2017 over 7 days

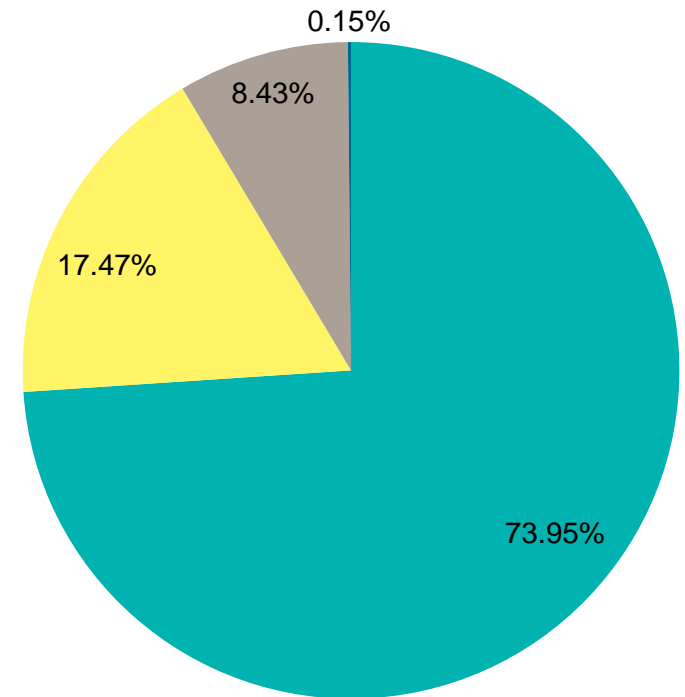


Behaviour pre-move

Juvenile N=4

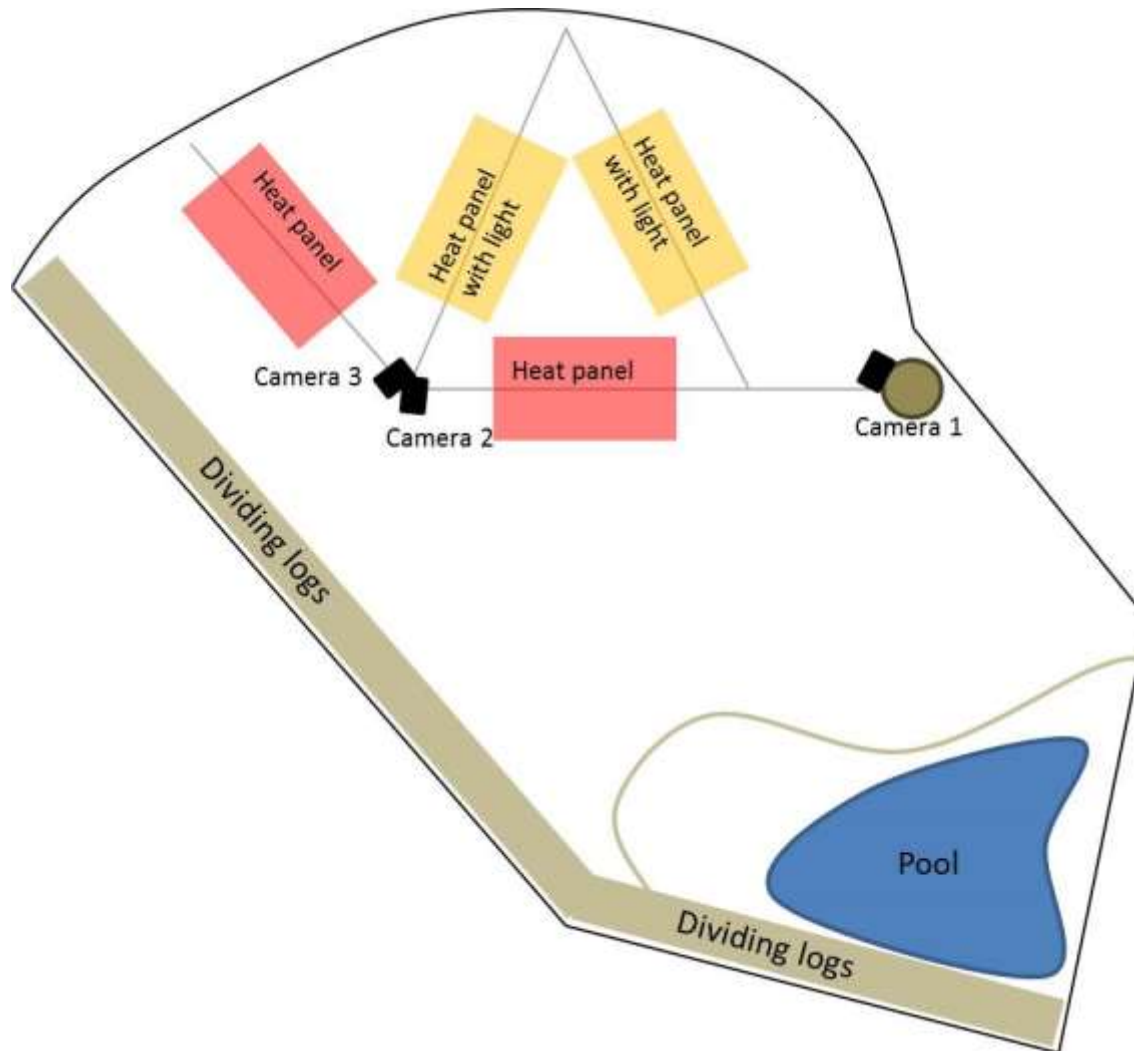


Adult N=3



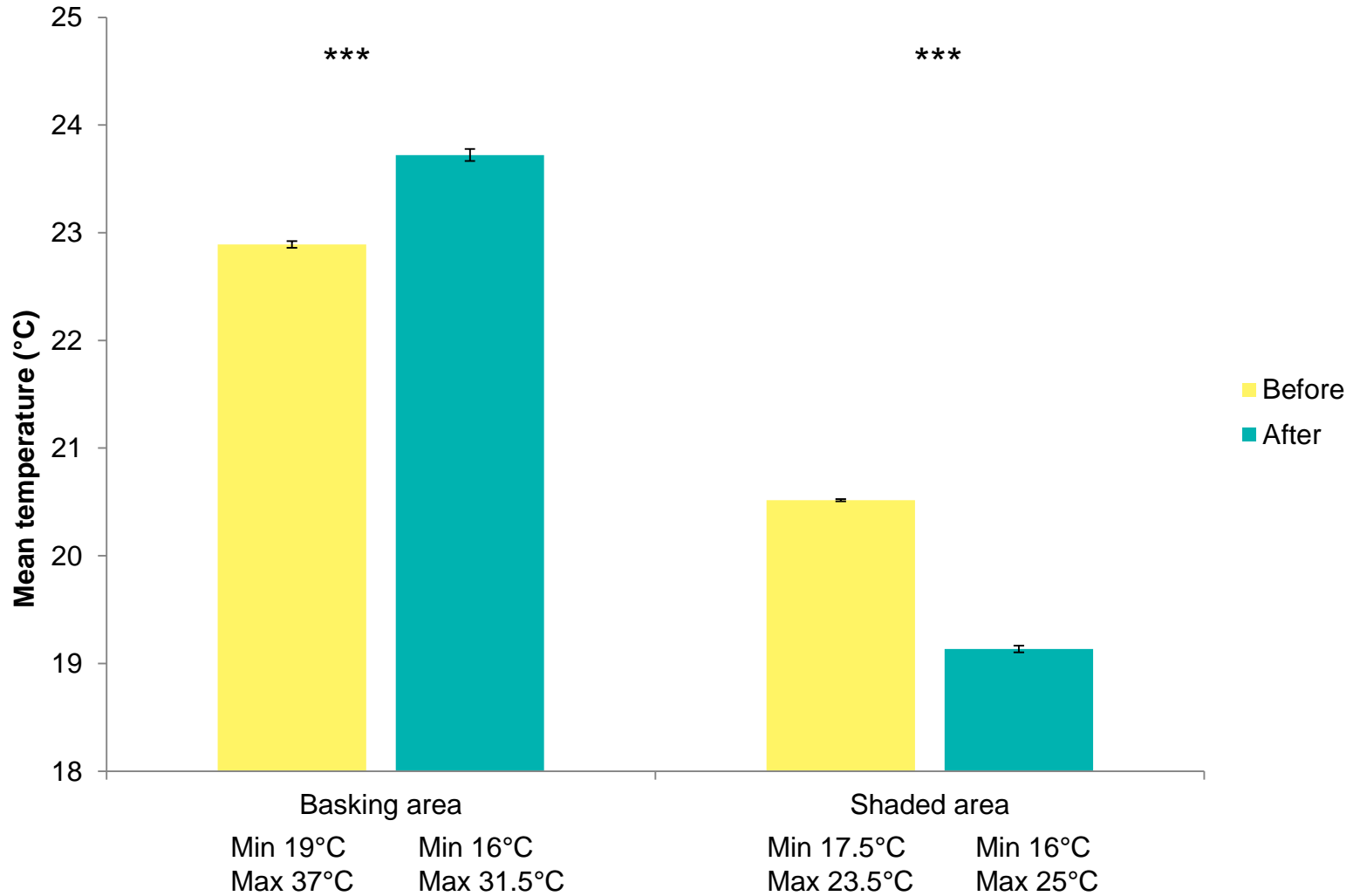
- Basking
- Foraging
- Locomotion
- Other

Post-move data collected February 2018 over 7 days

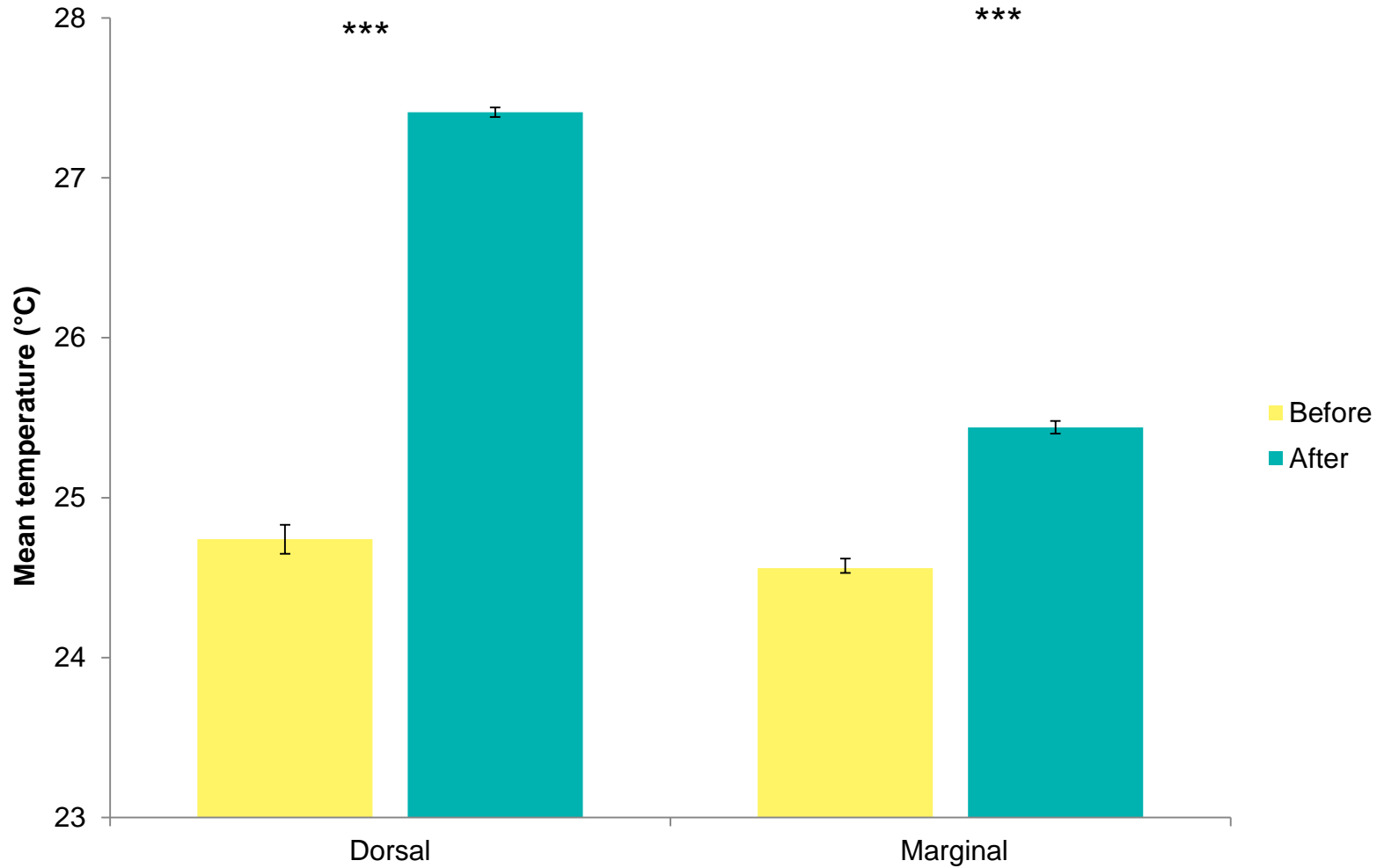




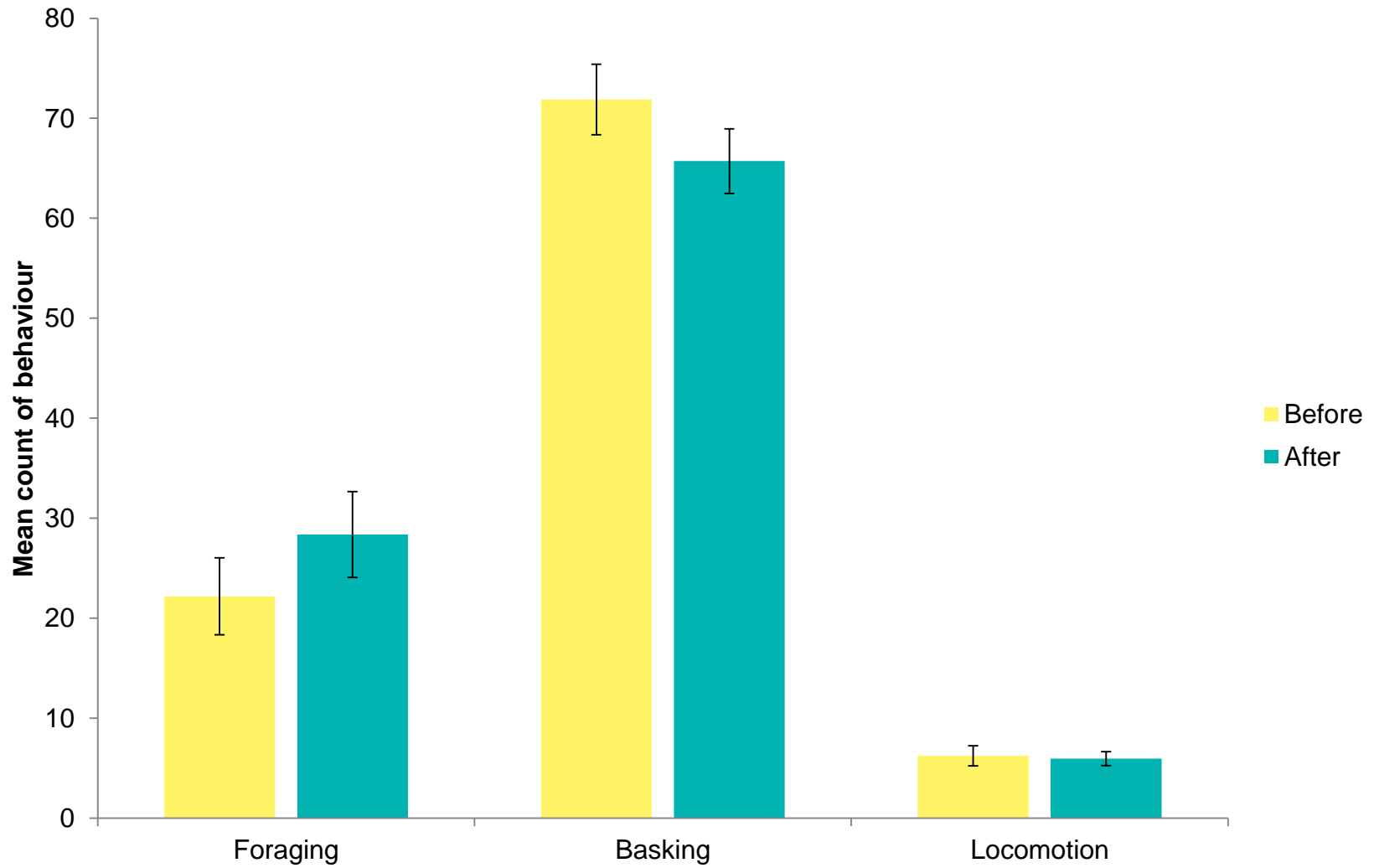
Ambient



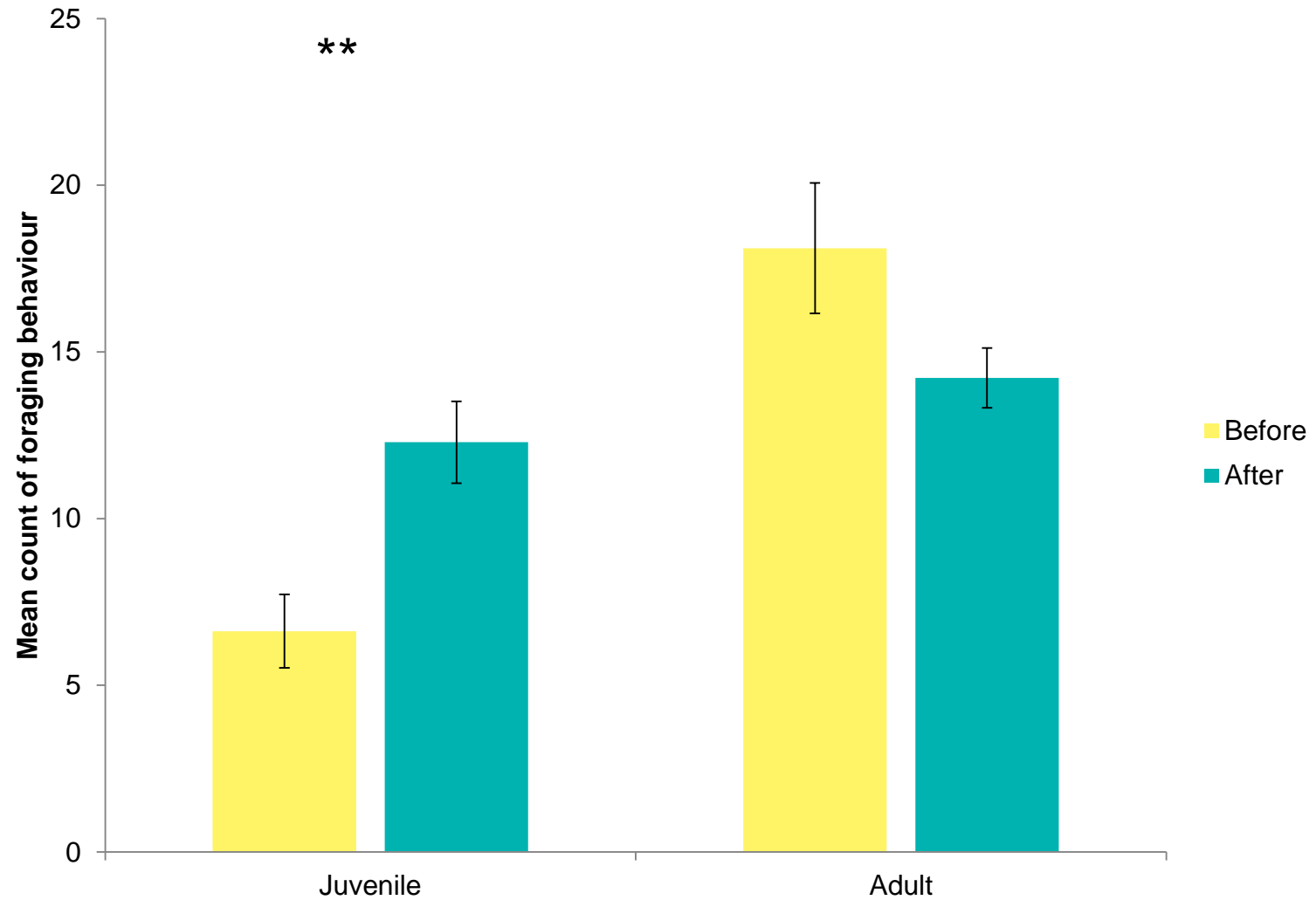
Carapace



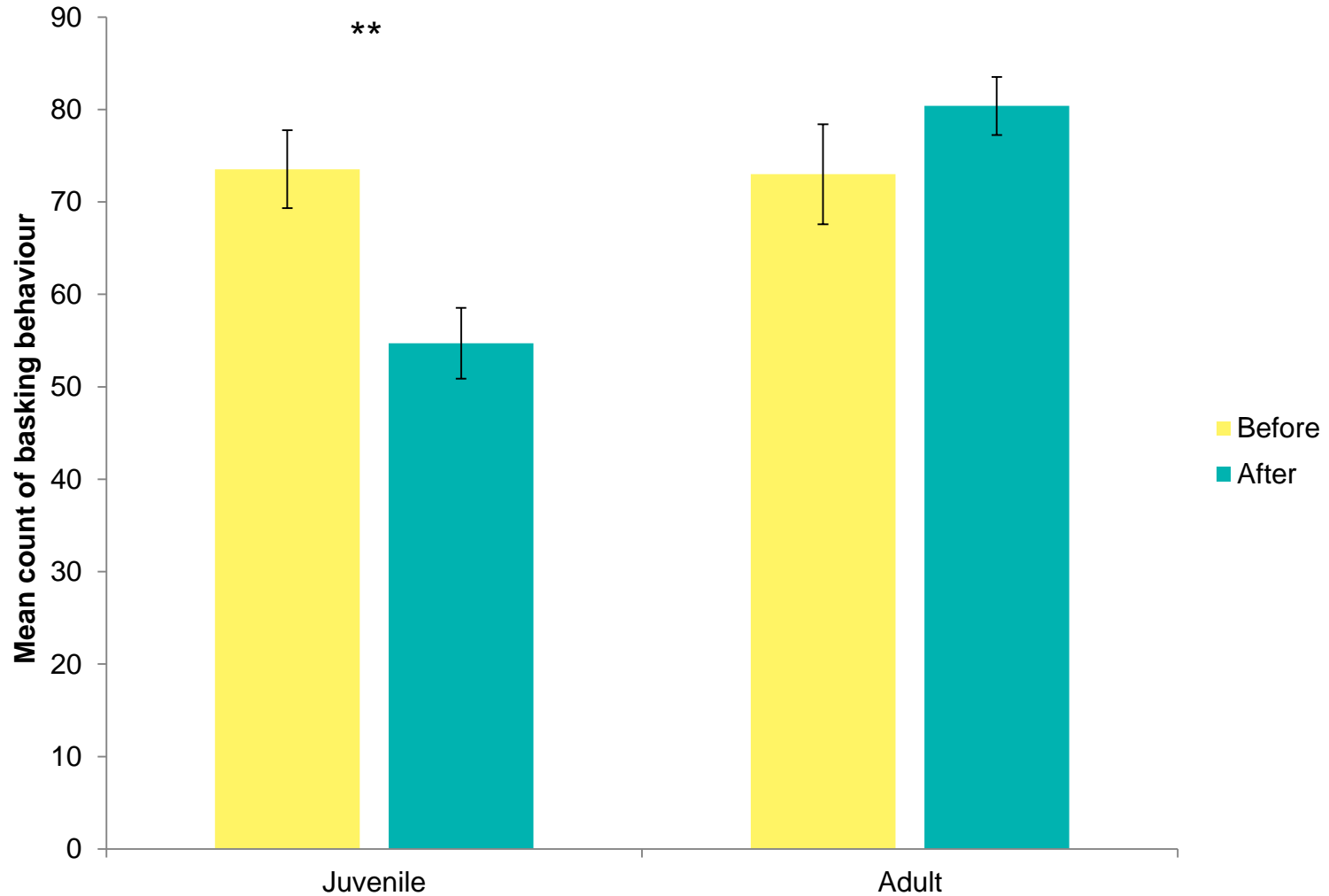
Behaviour post-move



Foraging



Basking



- A change in heat provision increased carapace temperature of all animals
- Enclosure move has had a positive impact on the juvenile radiated tortoises
- Monitoring behaviour of reptiles can be a useful welfare indicator





Questions?

