

# Behavioral responses of Amur tigers (*Panthera tigris altaica*) and bush dogs (*Speothos venaticus*) to the mammalian blood odor component 2-pentylfuran

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## Introduction and aims

Mammalian carnivores use the odor of blood to hunt down wounded prey. It is however less known which single components can elicit the same behavioral responses as the whole mixture that make up the odor of blood.

The aim of this study was therefore to investigate the behavioural responses of two large carnivores to the blood odor component 2-pentylfuran and to compare them with three odor odors.



A bush dog displaying the behavior sniffing

## Method

Wooden logs impregnated with one out of four odors (real pig blood, a blood odor component, a fruity odor or an odorless control odor), were presented to the Amur tigers and bush dogs kept at Kolmården Wildlife Park. The frequency of occurrence and duration of log-directed behaviors were recorded.



An Amur tiger displaying the behavior toying

## Results

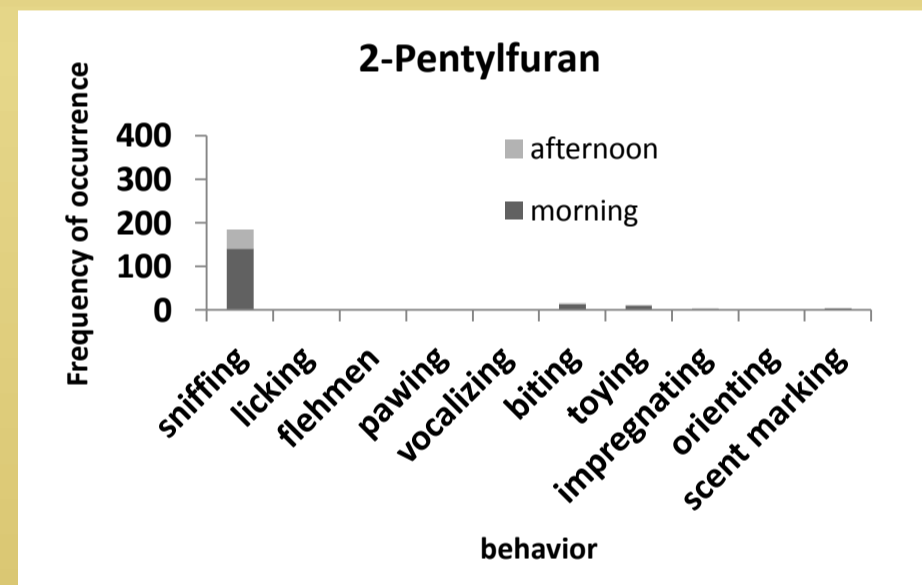
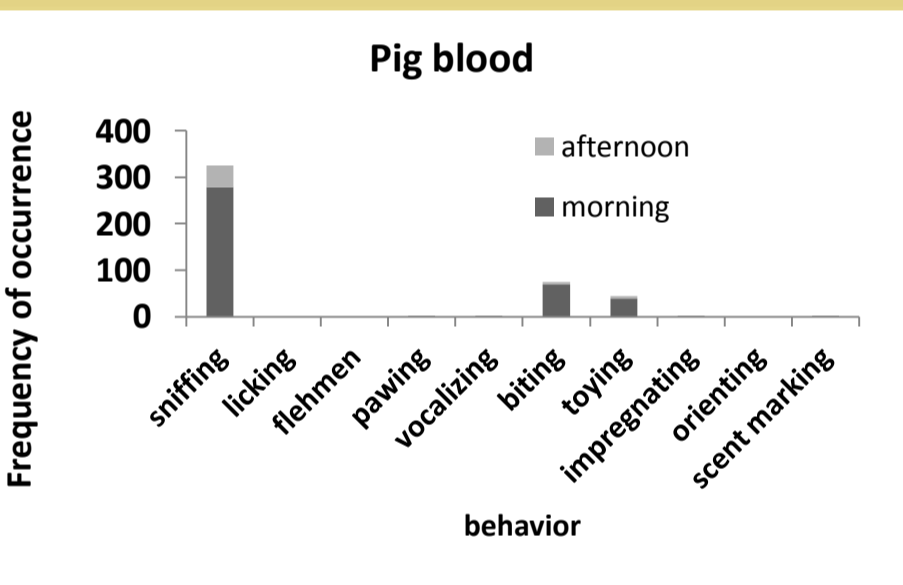
The bush dogs displayed a significantly higher number of interactions towards the real pig blood compared to the other three odors tested.

The tigers did not display any significant difference in the number of interactions towards any of the four odors tested.

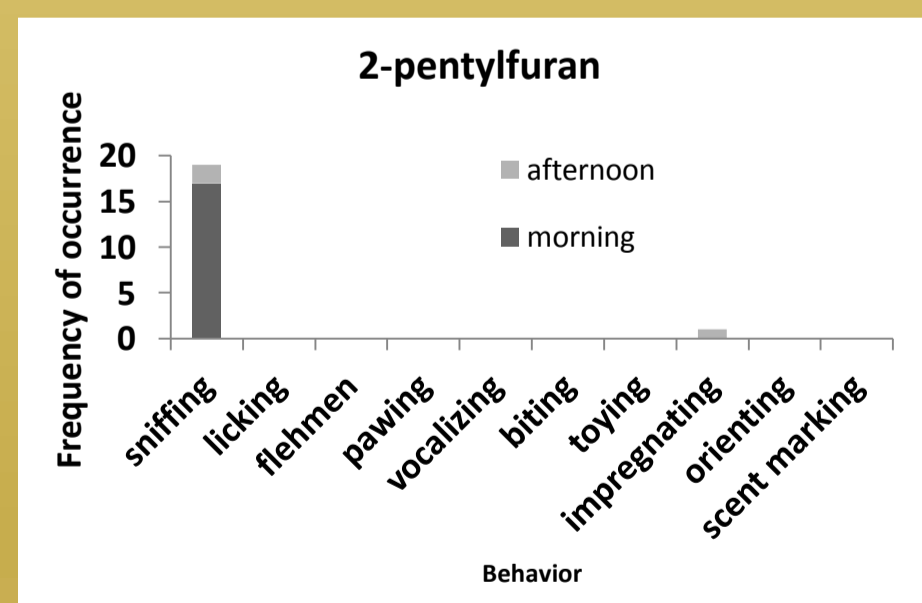
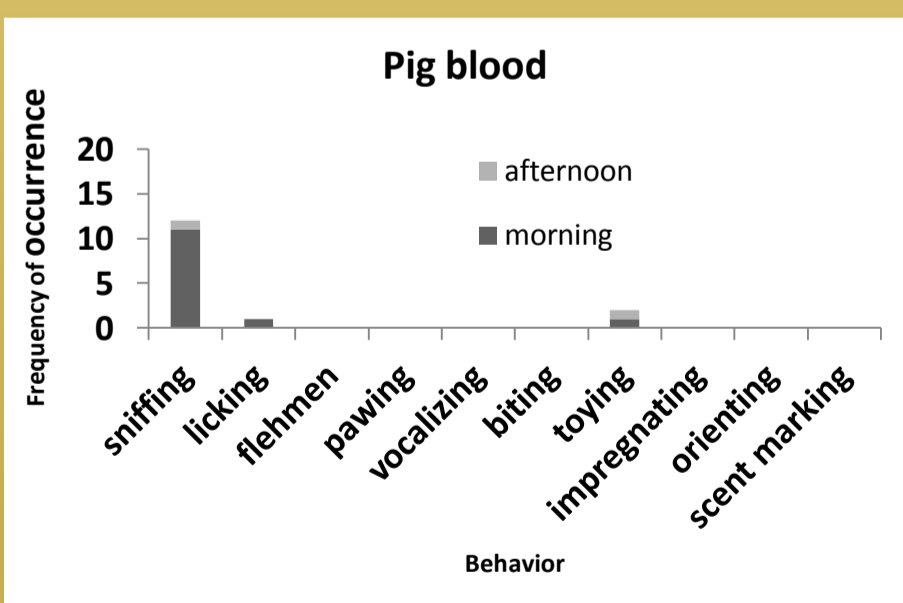
The bush dogs displayed significantly more interactions towards all four odors compared with the tigers.

## Conclusion

The bush dogs displayed the highest interest in the real pig blood which indicates that they perceived this odor as prey-related.



The frequency of occurrence of all log-directed behaviors displayed by the bush dogs with the real pig blood (left) and the blood odor component (right).



The frequency of occurrence of all log-directed behaviors displayed by the tigers with the real pig blood (left) and the blood odor component (right).



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2015-05-28



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