

# Do enclosure characteristics affect anti-predator behaviour in the European bison (*Bison bonasus*)?

Final thesis: International Master Programme Applied Ethology and Animal Biology 2009, Linköping University

By: Annika Hofling

Supervisor: Mats Amundin



## Aim

- To find out if animals respond differently to stimuli depending on enclosure characteristics

## Methods

### Animals in 7 enclosures

- 4 naturalistic
- 3 barren

### 3 types of stimuli

- Olfactory
- Auditory
- Visual

### 2 Measures

- Time
- Reaction

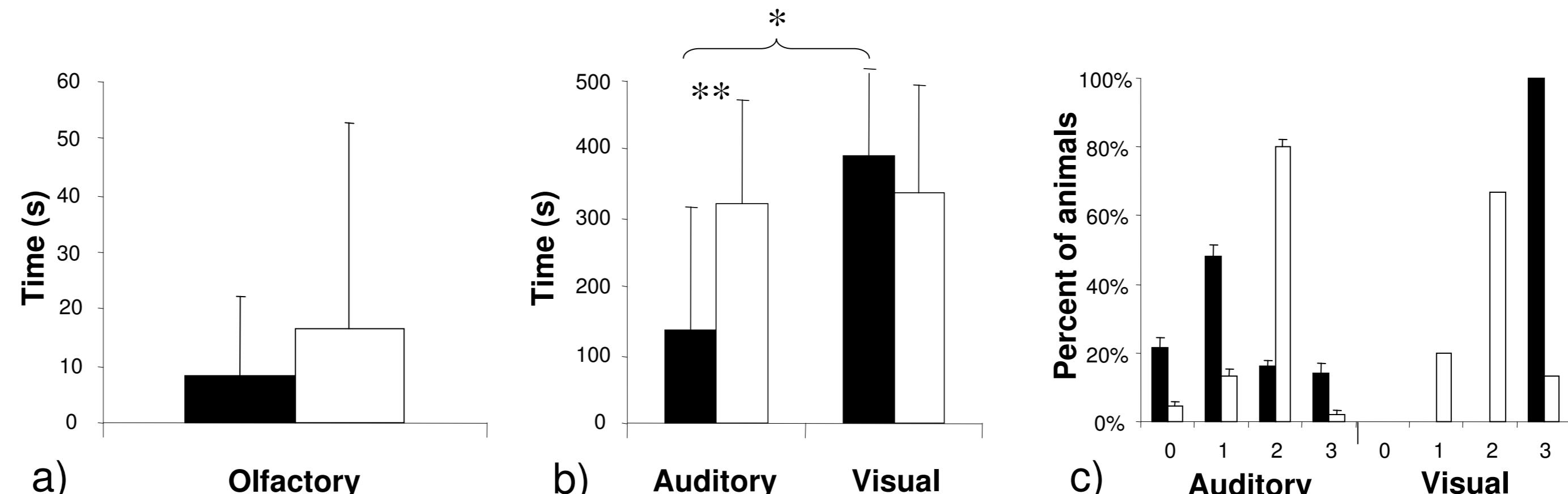


Figure 1. Mean time of interest ( $\pm$ S.D.) to a) olfaction and b) auditory and visual and c) percent of animals in each response category (0= no response, 3= most intense response) for animals in naturalistic (black bar) and barren (white bar) enclosures, \*\*  $p \leq 0.01$  \*  $p \leq 0.05$ .

## Animals in

- barren enclosures responded stronger than animals in naturalistic to auditory stimuli
- naturalistic enclosures responded stronger than animals in barren to the visual stimulus
- naturalistic enclosures responded stronger to the visual stimulus than auditory stimuli



## Conclusion

- Enclosure characteristics might have an effect on the anti-predator behaviour



Thanks to:



For more information: annika.hofling@gmail.com