

Mixed-species exhibits for lemurs: Inter- and intraspecific interaction rates and space sharing

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Background:

Mixed-species exhibits have been claimed to be beneficial for zoo animal due to welfare implications related to social and cognitive enrichment. Bioparc Valencia and Bioparc Fuengirola (Spain) harbour several species of lemurs in mixed-species exhibits. The aim of my study is to analyse the interactions between and within the species and the spatial use.

Methods:

The species in my study are:

B. Valencia: *Lemur catta*, *Eulemur rufifrons*, *Varecia variegata*, *Varecia rubra*, *Eulemur mongoz*.

B. Fuengirola: *Lemur catta*, *Eulemur macaco*, *Varecia variegata*, *Varecia rubra*.

I observed the behaviour using scan sampling by species, and one-zero sampling for the behaviours. I observed 9 different behaviours: Resting, locomotion, groom, play, attack, chase, vocalize, scent mark and mate.



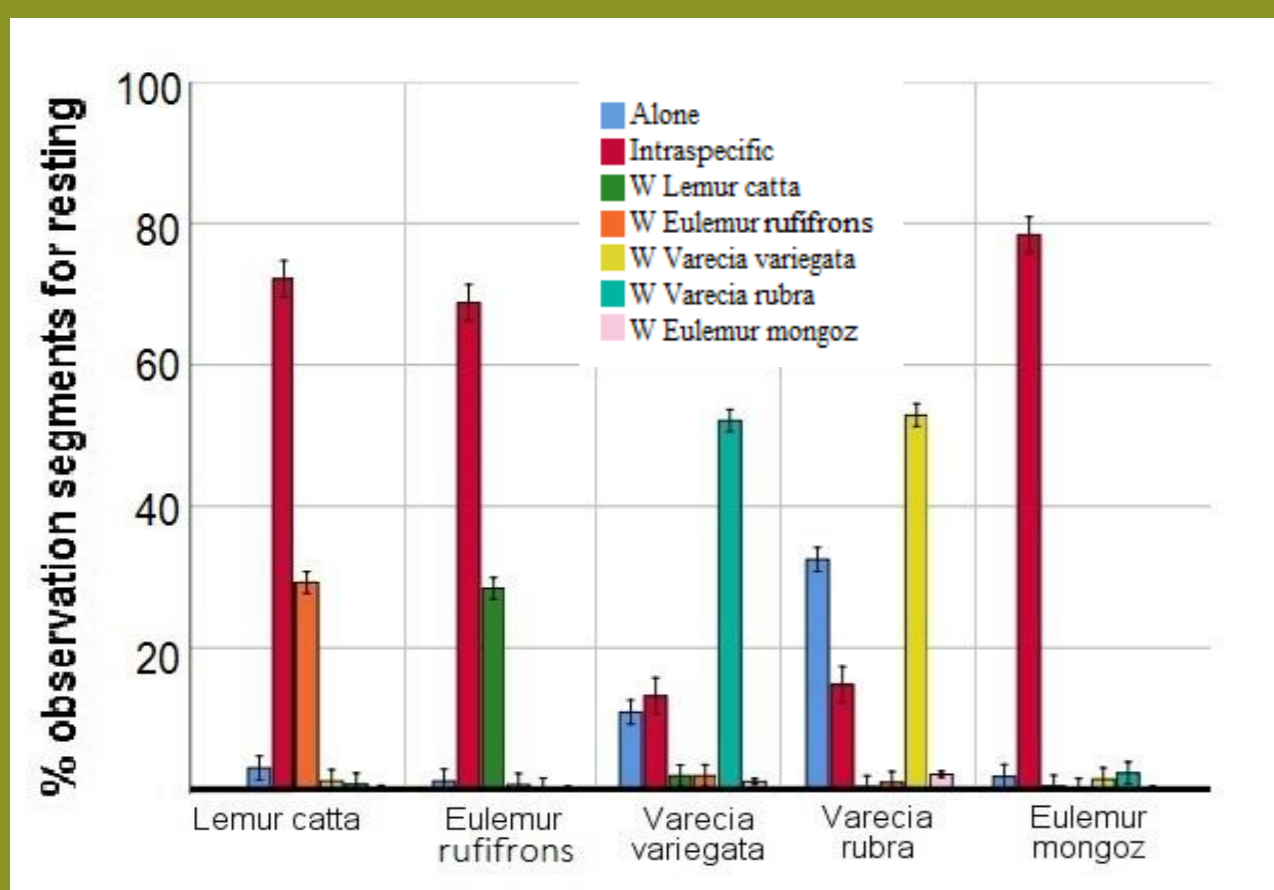
Mixed-species exhibit in Bioparc Valencia



Mixed-species exhibit in Bioparc Fuengirola

Results Valencia

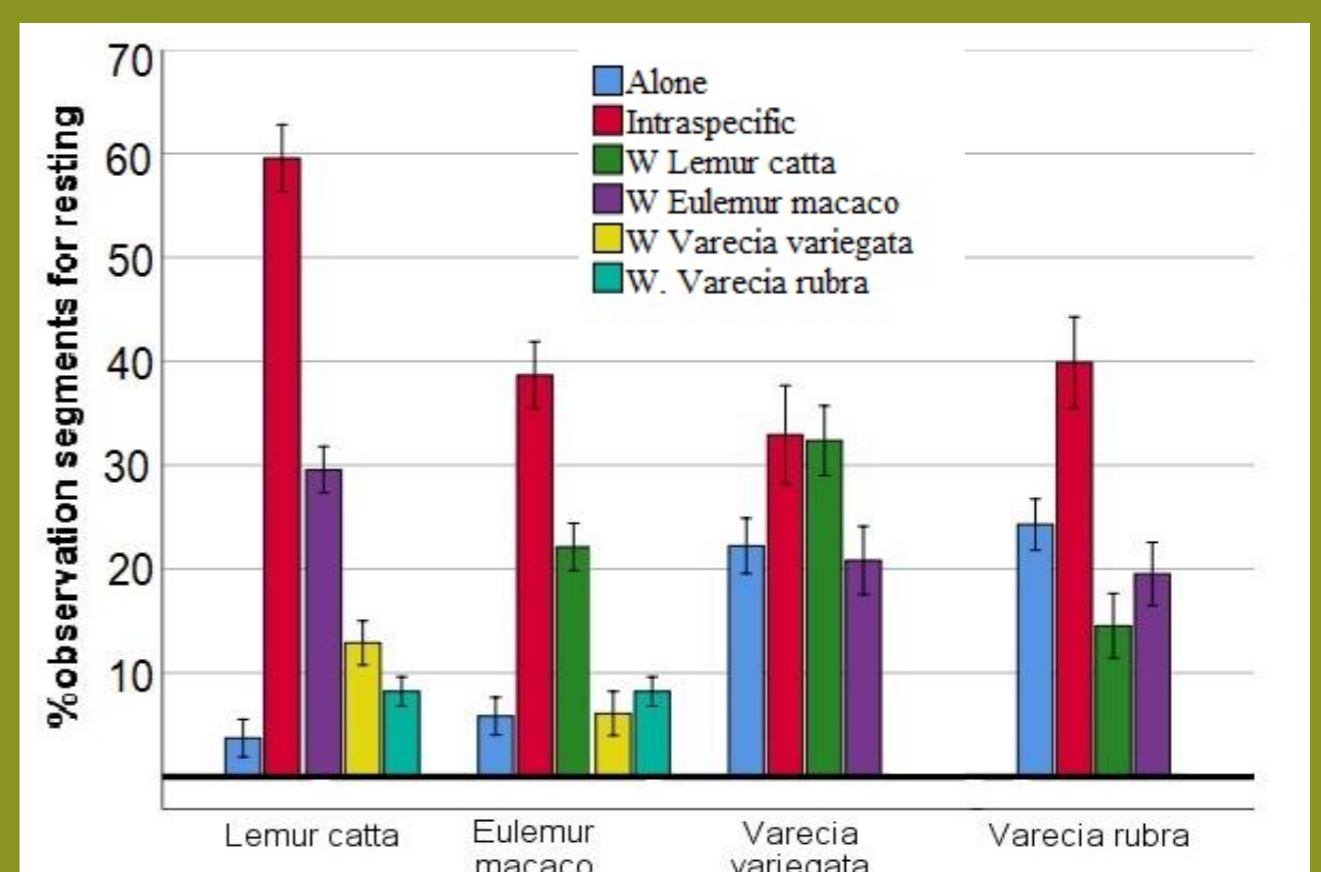
Resting was the most observed behaviour. I recorded the time they spend resting alone, with conspecifics or with other species.



- Sympatric species *Lemur catta* and *Eulemur rufifrons* spend most time together.
- Sympatric species *Varecia variegata* and *Varecia rubra* spend most time together
- No dominant species

Results Fuengirola

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- No tolerance between sympatric species *Varecia variegata* and *Varecia rubra*
- *Eulemur macaco* is the dominant species, although in not the most numerous group or the species with bigger body size.

Conclusion

I observed differences between the species in both parks, may be due to the enclosure size or management. Mixed-species exhibits might be beneficial for the individuals, but it is a very sensitive environment, so permanent monitoring is recommendable for the welfare of the lemurs and the long term succeed of the enclosure.