

Positive reinforcement in Zoo Wolves: An Explorative Research

Stress in captive wolves is an issue, it impacts the animal welfare, the ability for the keepers to care for them and, potentially, shows a negative image of the zoo to the public

Positive Reinforcement Training is based on reinforcing specific behaviours by rewarding the individuals exhibiting this behaviour



AIM: Use positive reinforcement to...



➤ Improve animal husbandry

➤ Improve animal welfare



Zoo 1: Namsskogan

Initial situation

- Two wolves: one ♀, one ♂
- Big enclosure (1,7ha)
- Wolves only come sometimes when called

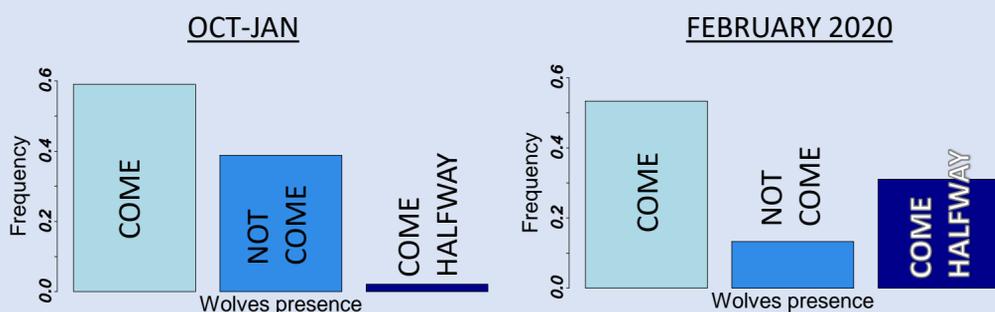
Goals & Method

- Make the wolves come to the food spot faster
- Make them come 100% of the time

Analysis of training log to record progress of training scheme over time

Results

Through positive reinforcement, the rate of wolves approaching the food spot significantly increased



Chi² test: p-value < 0.01 → Significant

Zoo 2: Ranua

Initial situation

- Two wolves: one ♀, one ♂
- Small enclosure (5.700m²)
- Wolves are scared when food thrown
- ♀ Do not stay in one zone

Goals & Method

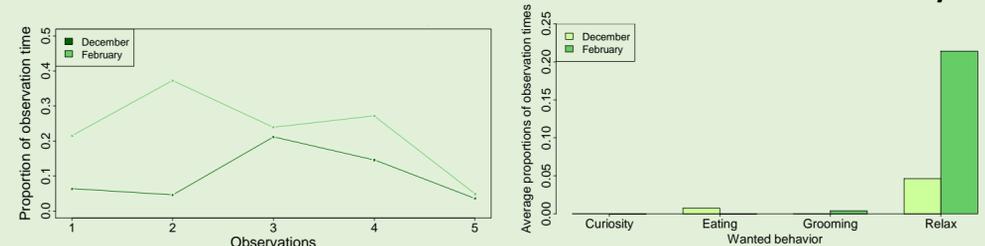
- Reduce stress behaviour
- Make them come to the food spot
- See the wolves eat the food

Observations twice: at the start of the training, and after a 3-month training progress

Results

Despite the results not being significant, there is a strong trend towards the ♀ wolf feeling more relaxed after 3 months of training

Evolution of "wanted behaviours" in the ♀ wolf between December and February



Wilcoxon test : p-value = 0.0625

→ Almost significant (0,05)

Conclusion

Positive reinforcement training in these zoo wolves seems to:

- Improve animal husbandry by increasing the wolves' willingness to approach the food spot.
- Improve the welfare of the female by having the secondary effect of increasing her "relax" behaviours

