ELABORATION OF A MANAGEMENT AND CONDITIONING ROUTINE IN GIANT OTTERS FOR BREEDING UNDER HUMAN CARE

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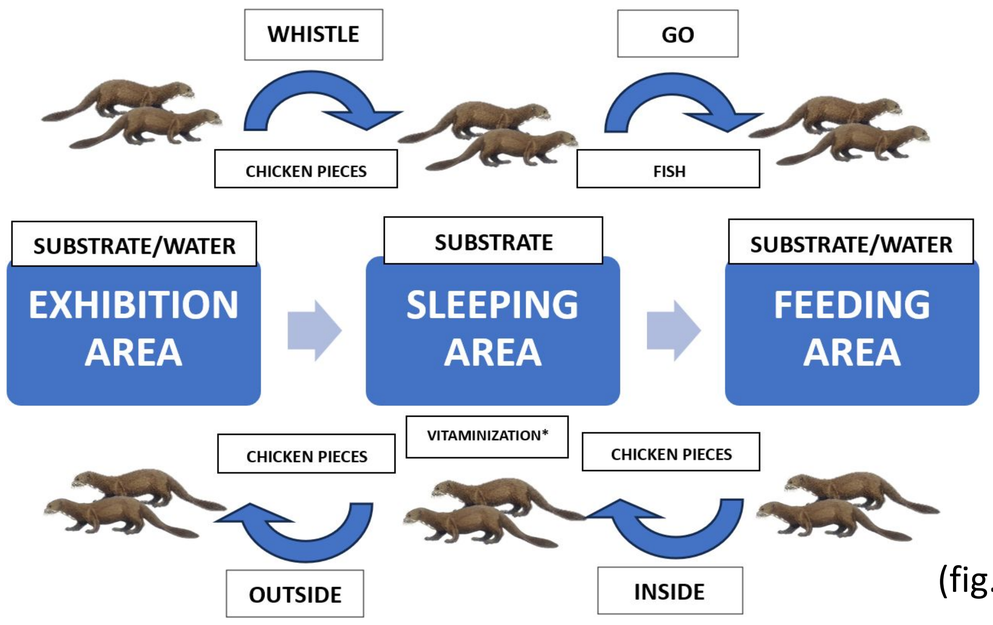
INTRODUCTION

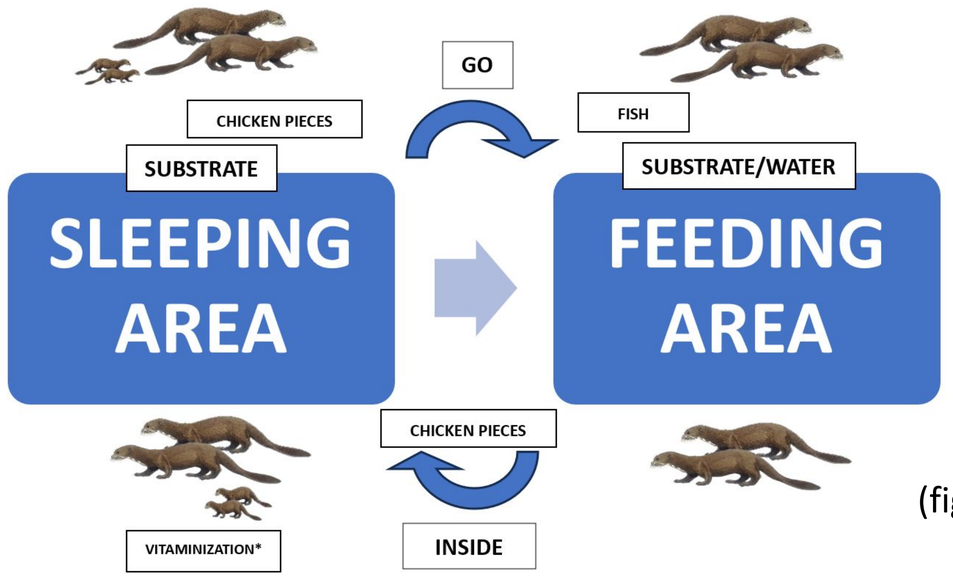
Giant river otters (*Pteronura brasiliensis*) under human care have presented difficulties in their reproduction. In this study, a management and conditioning routine was implemented in a pair housed at the Parque de las Leyendas Zoo (Lima, Peru) with the aim of improving reproductive success and ensuring the survival of the offspring.

METHODOLOGY



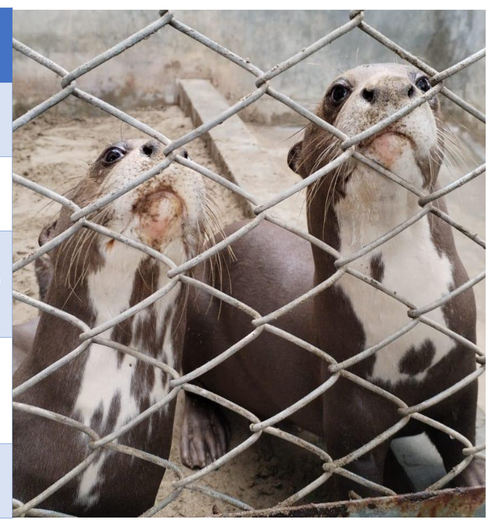
(fig.1)

EXHIBITION AREA	SLEEPING AREA	FEEDING AREA
Mating monitoring	Vitaminization	Consumption monitoring
		Nipple and belly size monitoring



(fig.2)

SLEEPING AREA	FEEDING AREA
Vitaminization	Consumption monitoring
Offspring monitoring	Postpartum estrus monitoring
Offspring conditioning for morphometry	Swimming exercise for offspring
Morphometric measurements	Recreational exercise for parents
	Diet presentation



*Before your first meal of the day

Conditioning before gestation

A feeding routine was implemented 3 times a day, the first shift very early in the morning, the second shift at noon and the third shift very late, with vitaminization before the first shift. Monitoring was constant in the 3 identified areas

(fig.1)

Conditioning during gestation

The feeding routine was finally fine-tuned. The pair of giant river otters was constantly monitored, especially the female with conditioning to observe her nipples and the relative increase in her abdomen. Monitoring her diet consumption was also important at this stage (fig. 1)

Postpartum conditioning

Only 2 of her 3 environments were used with the help of the feeding routine, this helped to have a better monitoring of the pups without intervention from the parents from the first week. Taking advantage of the monitoring of the pups, they were conditioned for the taking of their morphometric measurements. Recreational exercise was implemented for the parents from the second week and swimming exercise for the pups from the third week. The introduction of food by the father occurred at almost the third week (fig. 2)

RESULTS

- A positive response to conditioning was observed by the parents and later by the offspring (imitation), thus improving animal handling
- Reproductive success was achieved in the second pregnancy of 2 offspring
- Animal conditioning together with the implementation of well-structured routines facilitated monitoring and morphometry in the offspring.

CONCLUSION AND RECOMMENDATIONS

- For individuals where alloparental care was not taught, it is necessary to actively participate in reproduction when the objective is the survival of the offspring.
- Operant conditioning favors reproduction under human care
- Structured routines guarantee the well-being and survival of the offspring
- It is recommended to diversify the substrates and improve the infrastructure and access between areas
- The implementation of monitoring cameras is crucial for better monitoring of the specimens

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