

EFFECT OF FEEDING ENRICHMENT ON THE BEHAVIOUR OF GAZELLES IN CAPTIVITY

Gazella cuvieri



Nanger dama



Gazella dorcas



INTRODUCTION

Optimal **welfare** is crucial for the success of *ex situ* programmes.

In captivity, **abnormal or stereotypic behaviours** may indicate subpar conditions. These are often “treated” by providing **enrichment** which fulfills the animals’ needs.

In this study, we focus on how diet affects the behaviour of three species of endangered gazelles kept at **La Hoya Experimental Farm**, part of the Spanish National Research Council’s Experimental Station of Arid Zones (EEZA-CSIC).

La Hoya Experimental Farm



AIM

We evaluated the importance of **diet for captive ruminants** – sometimes containing excessive concentrate feed and lacking roughage – as well as the potential of **enrichment as a tool to assess and improve their welfare.**

METHODS

Ad libitum behavioural sampling (30 min/week/group)

Total: **63** individuals

For each species:

1 CONTROL group

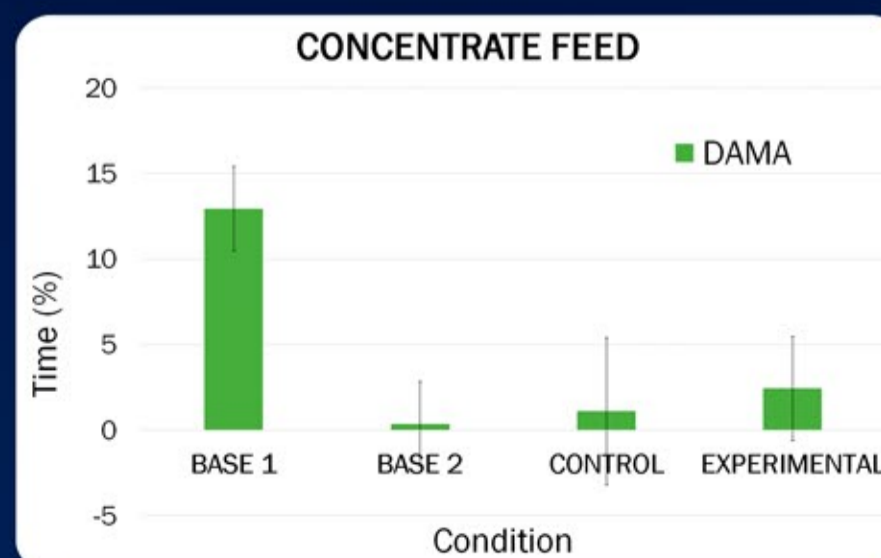
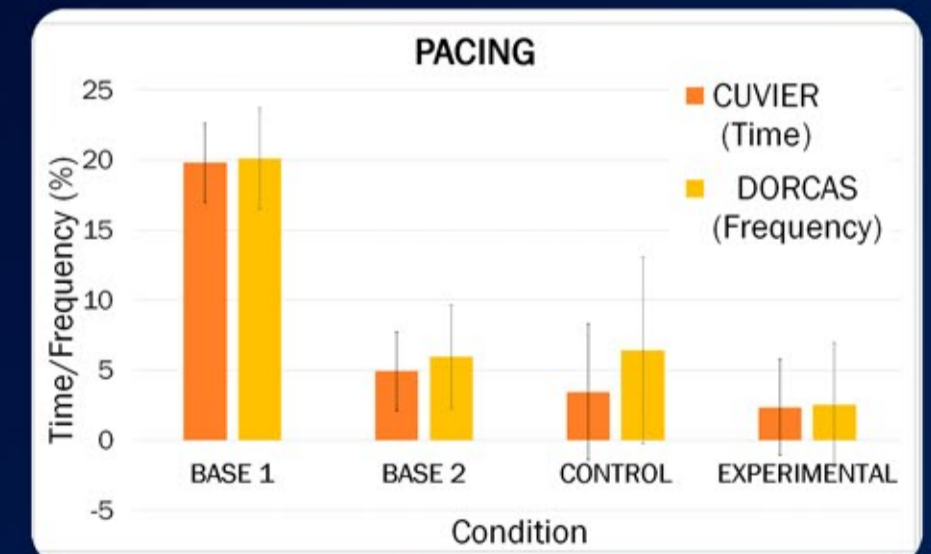
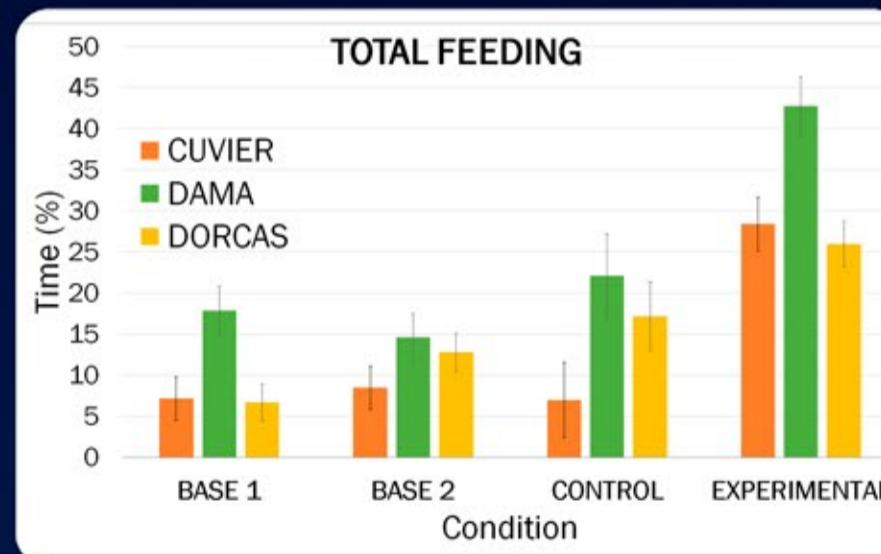
2 EXPERIMENTAL groups

BASELINE (BASIC DIET)									EXPERIMENT								
JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER					
1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
BASE 1			BASE 2						EXPERIMENTAL GROUPS								
Alfalfa/hay (weekly schedule) Concentrate (<i>ad libitum</i>)			Alfalfa+hay (<i>ad libitum</i>) Concentrate (<i>ad libitum</i>)						Basic diet + Fresh browse			CONTROL GROUPS					
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Farm-wide Diet Change																	

RESULTS

Total **time spent feeding** increased in all species when more roughage (especially **browse**) was provided.

Ad libitum **alfalfa** greatly decreased consumption of **concentrate feed** for Dama gazelles and reduced Cuvier’s gazelles and Dorcas gazelles’ **pacing** behaviour, which we considered to be a stereotypy (possibly related to gut discomfort).



CONCLUSION

High-fibre naturalistic diets allow the gazelles choice and opportunity for species-specific behaviours, improving their welfare.