DRIVERS OF ABANDONMENT RISK IN AUTOCHTHONOUS LIVESTOCK SYSTEMS: PRELIMINARY RESULTS FROM CASTILLA–LA MANCHA

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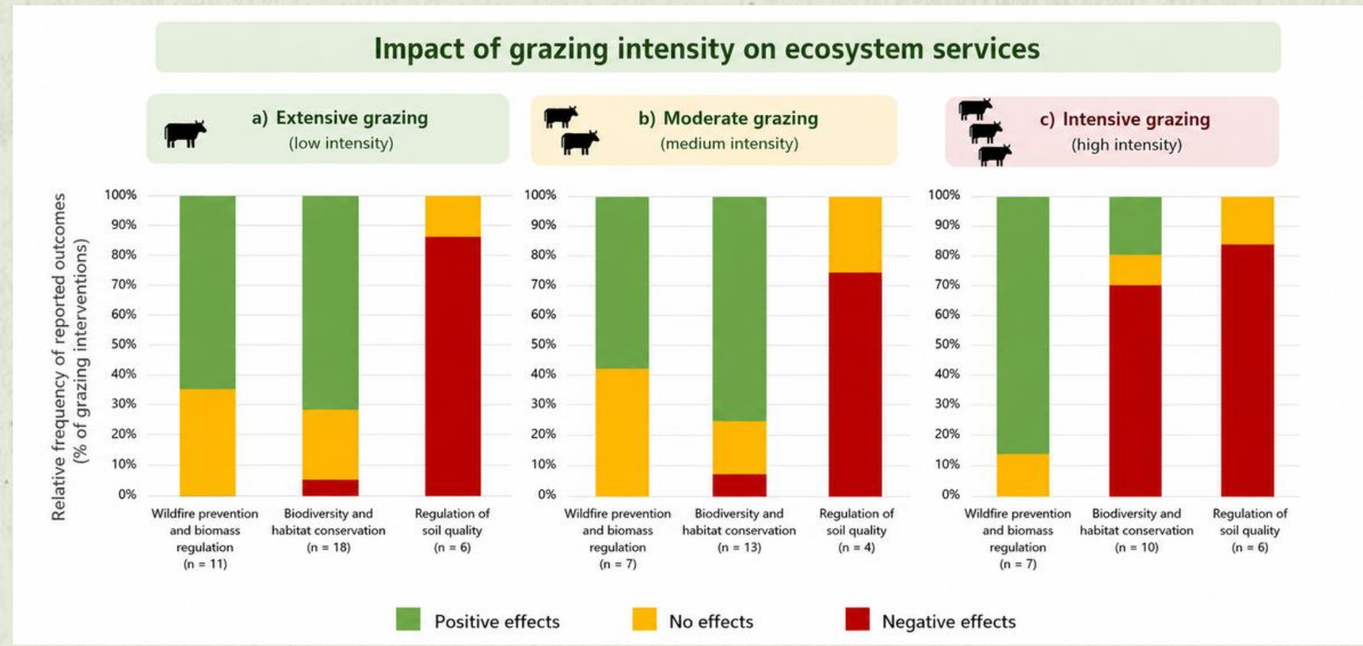



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INTRODUCTION – WHY DO LOCAL BREEDS MATTER?

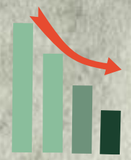
The value of Europe's livestock genetic diversity

- Use of marginal resources
- Wildfire prevention & landscape management
- Ecosystem services
- Adaptation & resilience
- Cultural heritage



Adapted from: Ribeiro, I., Domingos, T., McCracken, D., & Proença, V. (2023). The use of domestic herbivores for ecosystem management in Mediterranean landscapes. Global Ecology and Conservation, 46, e02577, DOI: https://doi.org/10.1016/j.gecco.2023.e02577

INTRODUCTION – WHY DOES ABANDONMENT MATTER?



Decline in the number of purebred livestock farms in the EU, despite their cultural, genetic and economic value

↳ Structural transformations in the agricultural sector



The conservation of livestock genetic resources is closely linked to the persistence of farmers maintaining purebred breeding systems



Farmers' exit from the system results from a complex interaction of structural, economic, and behavioural factors

Decline in purebred livestock farms in the EU threatens breed conservation

Identifying the drivers of abandonment is essential if we want to design effective strategies for breed conservation and rural development.



METHODS – RESEARCH QUESTION & THEORETICAL FRAMEWORK

What drives farmers' intention to continue purebred breeding?

Extended Theory of Planned Behaviour (TPBe)

Ajzen, I. (1991). The theory of planned behavior. Organizational behavior and human decision processes, 50(2), 179-211.



Attitudes



Subjective norms



Professional identity



others factors

Intention to continue purebred breeding



DATA & METHODOLOGY

DATA

- 202 face to face interviews
- Autochthonous ruminant breeds
- Breeding & conservation programmes
- 7-point Likert scale

ANALYSIS

Partial Least Squares Structural Equation Model (SEM-PLS)

Relationships between latent behavioural variables and abandonment intention



METHODS- MEASUREMENT MODEL

Construct	Items	Loading range	Cronbach's α	AVE (%)
Continuation intention	3	0.711-0.915	**0.759**	
Farmer identity	3	0.876–0.942	**0.886**	**82.04**
Subjective norm: professional support	3	0.666–0.851	**0.666**	**61.48**
Economic expectations	4	0.823–0.868	**0.874**	**72.84**
Socio-environmental value	5	0.737–0.894	**0.902**	**67.54**
Perceived capacity to continue	3	0.833–0.902	**0.801**	**77.35**

AVE > 0.50 for all constructs

Cronbach's α ≥ 0.80 for all constructs except FTS (0.666)

METHODS- STRUCTURAL MODEL

Factor	Total standardized effect
Professional identity	**0.681*** **
Formal technical support	**0.168*** **
Perceived behavioral control	**0.108*** **
Perceived socio-environmental value	**0.145*** **
Contextual optimism	**0.153*** **

***p < 0.001

MAIN RESULTS - WHAT DRIVES CONTINUITY INTENTION?



1° PROFESSIONAL IDENTITY



2° SUBJECTIVE NORM: **Professional support**



3° Other significant factors

- **Economic expectations**
- **Perceived socio-environmental value**
- **Perceived capacity to continue**



MAIN RESULTS - PROFESSIONAL IDENTITY

PROFESSIONAL IDENTITY MATTERS

WHY?



PROFESSIONAL ATTACHMENT →



SENSE OF BELONGING →



COMMITMENT TO THE BREED

Local breeds are often living family heritage

Professional identity may act as a buffer against abandonment

MAIN RESULTS - SUBJECTIVE NORM

SECOND MOST INFLUENTIAL FACTOR

PROFESSIONAL ENVIRONMENT

BREEDERS' ASSOCIATIONS

INSTITUTIONS

SOCIAL RECOGNITION

SUPPORT → COMMITMENT

AGRAMA
Asociación Nacional de Criadores de Ganado ovino Selecto de Raza Manchega

RAEANI
REAL ASOCIACIÓN ESPAÑOLA RAZA AVILEÑA-NEGRA IBÉRICA

ASOCIACIÓN NACIONAL CRIADORES GANADO MERINO

ANABE

acriflor
asociación de criadores de cabra florida

RAZA AUTÓCTONA 100%

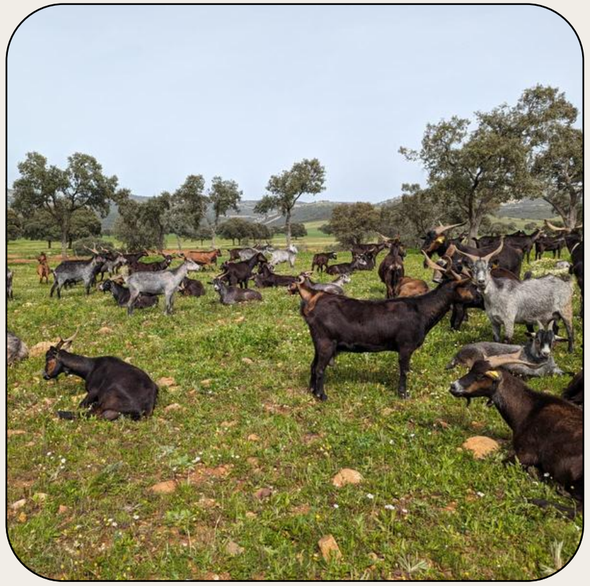
MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACIÓN

MAIN RESULTS - OTHERS SIGNIFICANT FACTORS



ECONOMIC EXPECTATIONS

Future prospects of the sector



SOCIO-ENVIRONMENTAL VALUE

Perceived contribution of the breed to society and the environment



PERCEIVED CAPACITY TO CONTINUE

Perceived feasibility of continuing farming

DISCUSSION – IMPLICATIONS

SUPPORTING FARMERS MEANS CONSERVING BREEDS

- Strengthen professional identity
- Increase social recognition
- Highlight socio-environmental value of local breeds

Context of growing scrutiny of farming practices and animal welfare.

- Reinforce institutional and professional support
- Improve farmers' perceived capacity to continue

Periodic monitoring to detect emerging trends and changes over time



FROM RESEARCH TO PRACTICE ... WHAT NEXT?

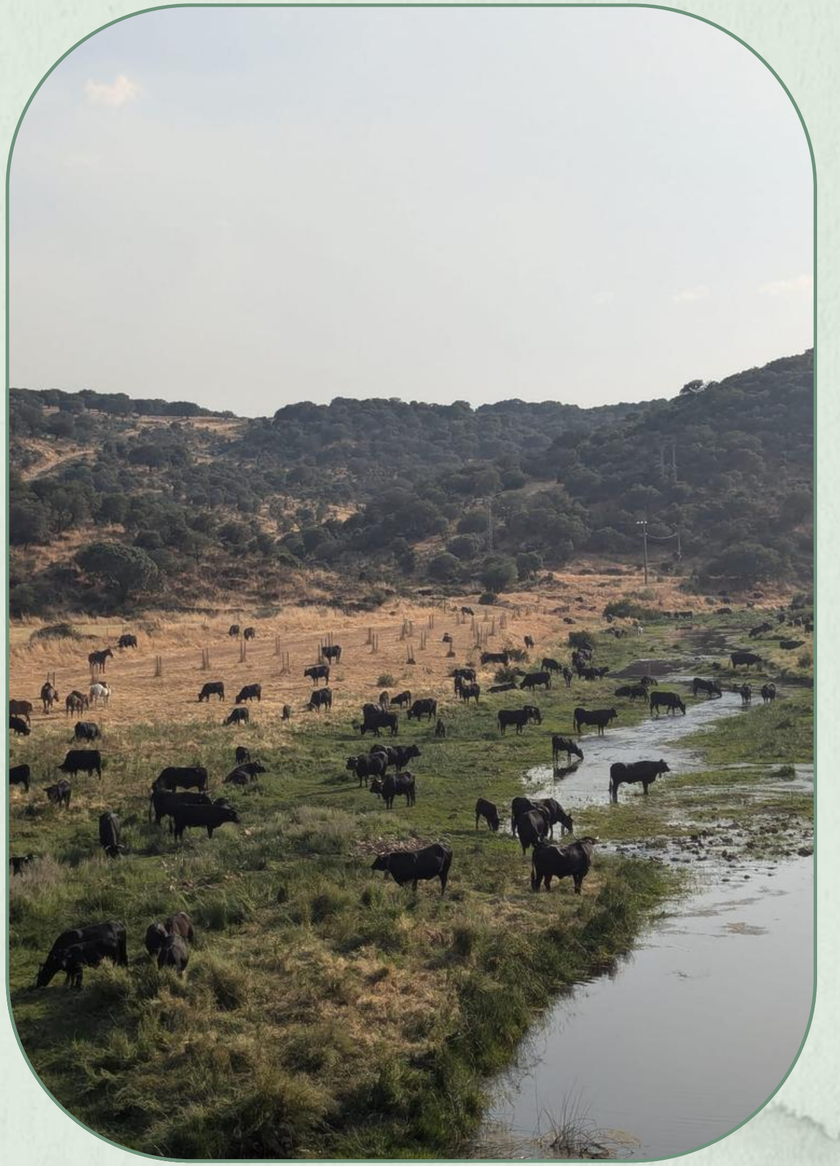
SMART BREED CLM

Web-based tool for associations and institutions to annually monitor intention to continue or abandon purebred livestock farming

Everyone interested in applying or expanding

SMARTBREED is welcome to join us!

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EAAP
European Federation of Animal Science

THANK YOU FOR YOUR ATTENTION

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