



"In-situ Conservation and Valorisation of Animal Genetic Resources (AnGR) in Spain"

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DENOMINACIÓN DE ORIGEN

























IRIAF

Regional Institute for Research and Development in Agrifood and Forestry in Castilla-La Mancha

























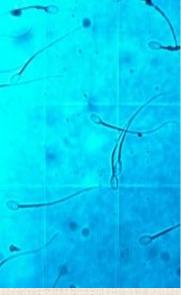
REGIONAL CENTER FOR ANIMAL BREEDING AND REPRODUCTION

















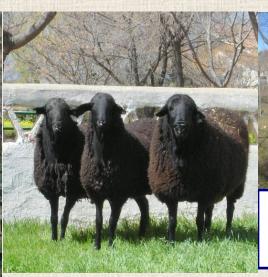






Conservation & Selection Programmes







CENTER

RAMS

















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 - Breeding Programs.
 - How to consider a breed is at risk?
 - Spanish Breeds "at Risk".
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- 4. "In-situ" Conservation in Spain.
- Final Comments.







IRIAF CERSYRA

Historical Background



"LA MESTA" COUNCIL (1273-1876)

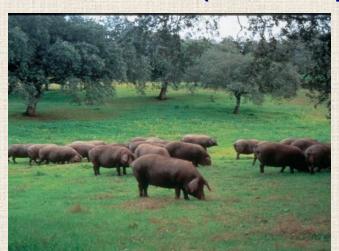


ROYAL STUD FARM (16th Century)



FIGHTING BULL BREEDERS

(17th Century)



IBERIAN PIG PRODUCTS (17th Century)





Historical Background

60's National Centers for Animal Selection and Reproduction.

70's ____

Breeders Associations.

Performance controls

Herd books.

80's

Spanish Society for AnGR (SERGA).

90's ----

Committee for Spanish Livestock Breeds.

Convention on Biodiversity - CBD (Rio de Janeiro, 1998).

Spanish Strategy for Conservation and Sustainable Use of Biodiversity.









Breeding Programmes

ENDANGERED BREEDS

Extensive Production Systems



National Commission for the Coordination of the National Program for Livestock Breeds

EVALUATION



Intensive // Semiextensive Production Systems



CONSERVATION PROGRAMMES

Breeding Goals

Conserving genetic variability

Keeping the census

Rusticity

Environmental and sustainable use

SELECTION PROGRAMMES

Breeding Goals

Performance Improvement
Profitability
Competitiveness
Food-supplying









How to consider a breed is "at risk"?

National Commission for the Coordination of the National Program for Livestock Breeds

SPANISH CRITERIA							
DEMOGRAFIC	OTHERS						
Nº Breeding Females	Effective Population Size (N _e)	Geographical distribution (km²)					
Nº Breeding Males		Population Trend					
Average Purebred females registered in last 3 Years	Rise of Inbreeding (Δ F)	Nº of Farms					
registered in last 3 fears		Gene Banking					



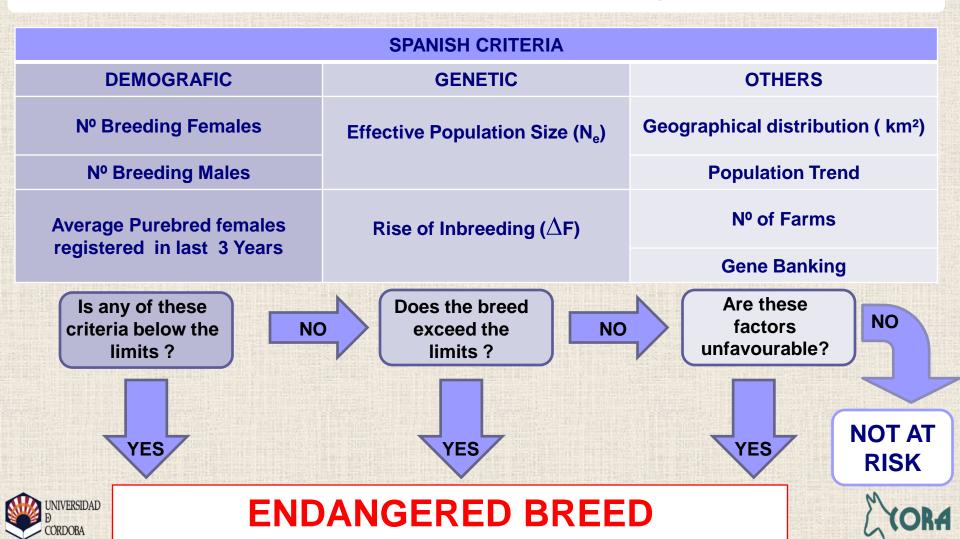






How to consider a breed is "at risk"?

National Commission for the Coordination of the National Program for Livestock Breeds







Spanish Authocthonous Breeds

SPANISH BREEDS					M		Ä	TOTAL
NATIVE IN DEVELOPMENT	7	10	5	3	1	0	1	27
NATIVE AT RISK	31	33	17	9	13	6	17	126
INTEGRATED	7	6	0	6	4	0	0	23
EUROPEAN UNION	0	1	1	0	0	0	0	2
THIRD COUNTRIES	0	1	0	0	0	0	0	1
OTHER REGISTERED EQUIDAE	0	0	0	0	1	0	0	1
TOTAL	45 (38)	52 (43)	23 (22)	18 (12)	19 (14)	6 (6)	18 (18)	181 (153)









Spanish Authocthonous Breeds

SPANISH BREEDS					M		Ä	181
NATIVE IN DEVELOPMENT	7	10	5	3	1	0	1	27
NATIVE AT RISK	31	33	17	9	13	6	17	126

SPANISH BREEDS	181	%
AT RISK	126	69.6%









Spanish Authocthonous Breeds

SPANISH NATIVE BREEDS					M		Ä	153
NATIVE IN DEVELOPMENT	7	10	5	3	1	0	1	27
NATIVE AT RISK	31	33	17	9	13	6	17	126

SPANISH NATIVE BREEDS	153	%
AT RISK	126	82.3 %









Wildlife species vs Autochtonous livestock "at risk"



	National Census (2016)	TOTAL	Flocks/Herds				
AL ALL	Bear	300					
	Iberian Lynx	584					
	Iberian Wolf	2.079	297				
105 B	Berrenda en Negro (Black Spotted)	2.384	86				
A PARTY	Berrenda en Colorado (Red Spotted)	4.378	139				
LIMIVERSIDAD			M				

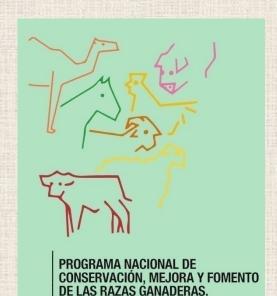




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Regulatory and Institutional Framework

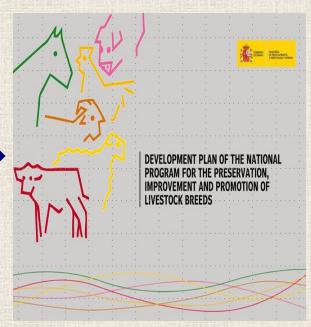
ROYAL DECREE 2129/2008



National Program for the Preservation, Improvement and Promotion of Livestock Breeds

7 Strategic Priorities

- 1. Inventory of Breeds.
- 2. Promotion of pure breeds rearing.
- 3. Animal Genetics and Reproduction.
- 4. Institutional coordination.
- 5. Information Management.
- 6. Sustainability and alternative uses.
- 7. Funding.





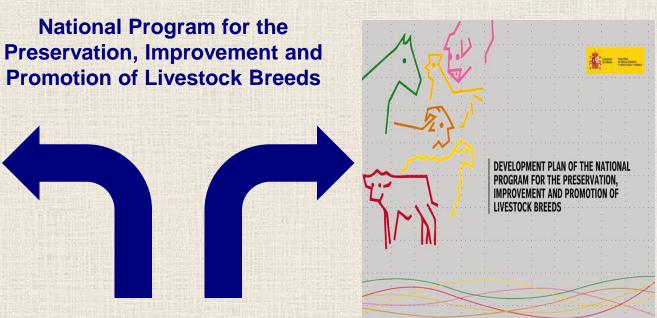






ROYAL DECREE 2129/2008





Regulation (EU) 2016/1012

(It shall apply from 1 November 2018)









EUROPEAN UNION

Standing Committee on Zootechnics

FAO ERFP **INTERNATIONAL INSTITUTIONS**

EAAP - ICAR - ISAG

MINISTRY OF AGRICULTURE, FISHERIES, FOOD AND ENVIRONMENT

(FAO – National Focal Point)

General Directorate for Markets and Productions

General Subdirectorate for Livestock Productions









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AUTONOMOUS COMMUNITIES (17)









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AUTONOMOUS COMMUNITIES (17)

Universities

Research Centers

Breeds Inspectors

LIVESTOCK BREEDERS
ASSOCIATIONS

Animal Genetics Labs

Breeding Centers









"In situ" Conservation

Management of breeds, <u>carried out by farmers</u>, according to <u>traditional</u> <u>production systems</u> in the <u>environment</u> where the breeds have been evolving through ages or in those other places where they are reared now.





"In situ" Conservation

Original Environments

Non-original Environments

Traditional systems.

Non-traditional systems.

Conservation farms / Experimental flocks /Farm-schools

Protected areas.

Zoos.

"Ex situ" Conservation









"In situ" Conservation

Objectives

- 1. Support livestock keepers.
- 2. Self-sustainability of the Production Systems.

Range of activities

- 1. Rise of Productivity (Δ \$) + Rise of Inbreeding (Δ F).
- 2. Products Marketing.
- 3. Advice on Management.
- 4. Alternative uses.
- 5. Support Payments.











Rise of Productivity (Δ \$) + Rise of Inbreeding (Δ F)







Products Marketing (Labelling schemes)





















Products Marketing (Labelling schemes)









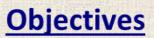












- Fostering of the knowledge on authorthonous Spanish livestock breeds.
- 2. Promotion of the **consumption** of products from our local breeds.
- 3. Provide an added value to the breeds and their products.
- 4. Preservation of Biodiversity through the conservation of our nature values.









Advice on Management



PART I

Reproductive management in extensive livestock farming with Authoctonous breeds.

PART II

Evaluation of the Life Project "<u>The</u> Wolf in Andalusia, changing attitudes" and his impact on extensive livestock farming.

PART III

Dehesa's management in extensive livestock farming with Authortonous breeds.



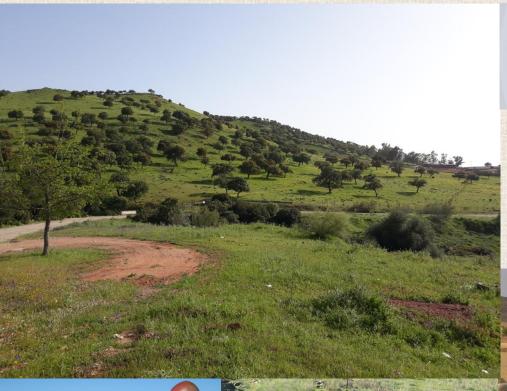








Alternative Uses







- Agro-tourism
- Gastronomic tourism
- Conservation Grazing
 <u>"The Firefighter Sheep Project"</u>











Support Payments (Subsidies)

- 1. Promotion of extensive production systems RD 181/2015
- 2. Promotion of Spanish local breeds RD 1625/2011
- Promotion of agrifood quality products RD 1615/2007
- 4. Support to Breeders Associations:
 - Official Control of Dairy Livestock Performance RD 368/2005
 - Conservation, Improvement and Promotion of Livestock Breeds Order AAA/653/2015









Support Payments (Subsidies)

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Rural Development Programs

Strategic Plan for the Protection of Extensive Livestock Farming in Castilla – La Mancha

Animal Welfare in Extensive Farming Systems

Subsidies for Livestock Breeds at Risk

Promotion of Local Livestock Breeds.

"The Fire-fighter Sheep Project"





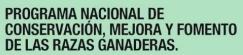




FINAL COMMENTS























Thanks a lot!

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