Bringing trashumance back to life as an option to the future: collection of nine years of experience

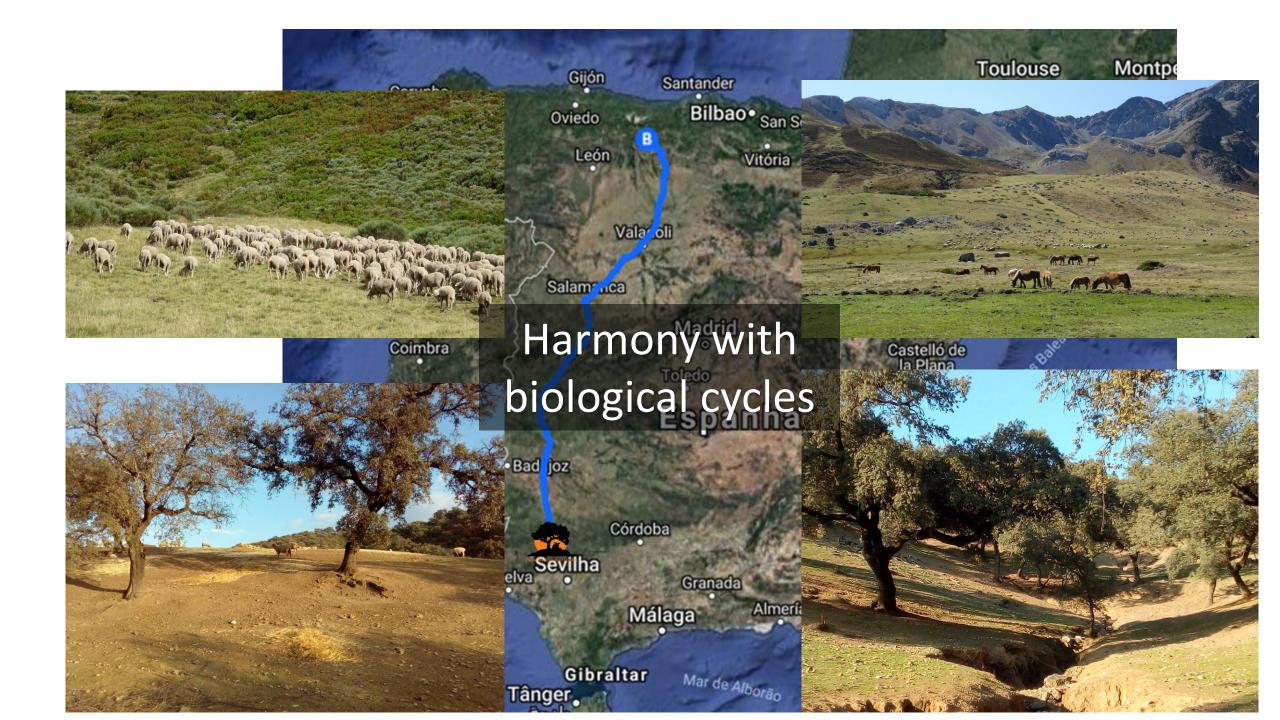
Mariana Yuan Ribeiro Couto





1st IBERIAN MEETING ON AGROECOLOGICAL RESEARCH Establishing The Ecological Basis For Sustainable Agriculture 22-23 November 2018 – University of ÉVORA, Portugal





TRASHUMANCE AND AGROECOLOGY



Redesign and upkeep of the landscape

Technical
Agronomic
And Ecological

Culture

Native Breeds



High added value to the territory



Creation of jobs

Technology

Socioeconomic Sociopolitical

Tradition



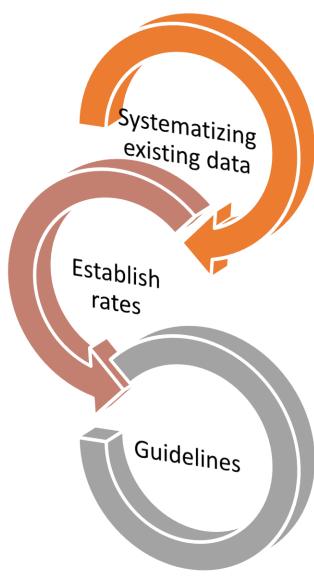
Maintaining the population in rural areas





Methodology



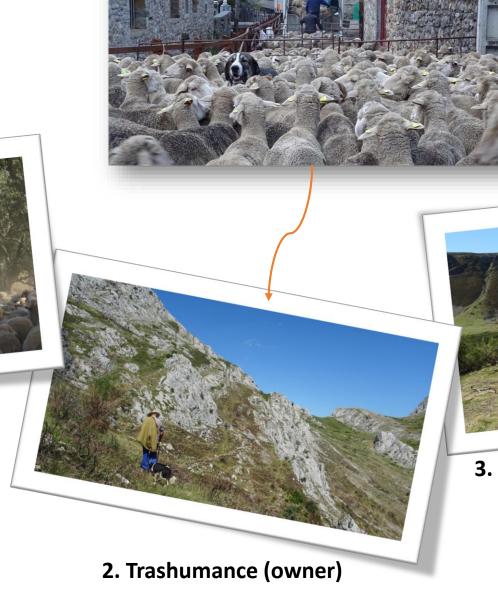


2009 2018





1. Trashumance (on foot)







FUNDACIÓN MONTE MEDITERRÁNEO

Case 1. Trashumance (on foot)

N.º animals	860
Mortality Rate	1,16%
€ economic losses/ Mortality (100€/sheep)	1.000,00€
Wolves /Brown bear attacks	1 (bear)



INDICES OF INTEREST Economic impact per hectare of transhumance land 66,34 € Economic impact per sheep during trashumance 77,14€ Costs without Trashumance 29,76€ **Diferencial** +47.38 € Indirect Economic Activity Generated 43.940,00€ Economic impact by herd 66.340,00€ Generate Jobs by hectare 0,003 Generate Jobs by sheeps 0,0035 Generate Jobs by herd

Principals Problems

- 1. High labour intensity
- 2. Lack of qualified shepherds
- 3. Disqualified cattle trails
- 4. Require greater support

Case 2. Trashumance (owner)

300	FUNDACIÓN MON
38%	
,00€	



N.º animals	1120	1300
Mortality Rate	0,98%	0,38%
€ economic losses/ Mortality (100€/sheep)	1.100,00€	500,00€
Wolves /Brown bear attacks	0	0

INDICES OF INTEREST					
Economic impact per hectare of					
transhumance land	8,00€	12,70 €			
Economic impact per sheep during					
trashumance	7,14 €	9,77€			
Costs without Trashumance	16,73	21,51 €			
Diferencial	-9,59 €	-11,74 €			
Indirect Economic Activity Generated	8.000,00€	10.100,00€			
Economic impact by herd	8.000,00€	12.700,00 €			
Generate Jobs by hectare	0	0			
Generate Jobs by sheeps	0	0			
Generate Jobs by herd	0	0			

Principals Problems

Over-dependence by the farmer (owner) – No holidays

Case 3. Trashumance (shepherds recruitment)

	AVERAGE
N.º animals	1431,56
Mortality Rate	1,41%
€ economic losses/ Mortality (100€/sheep)	2.712,50 €
Wolves /Brown bear attacks	2

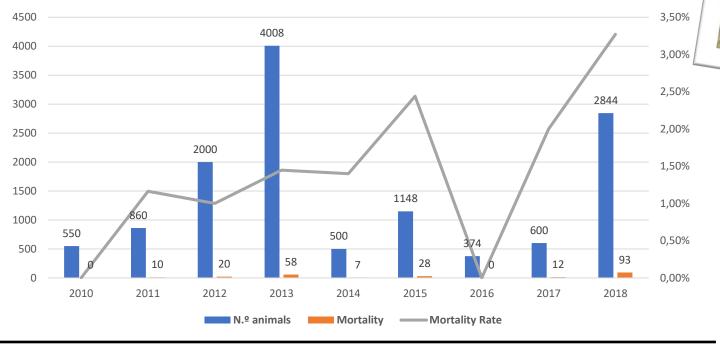
INDICES OF INTEREST

17.498,85 € Indirect Economic Activity Generated 25.010,50 € Economic impact by herd Generate Jobs by hectare 0,00312 Generate Jobs by sheeps 0,00352 Generate Jobs by herd 2,23





Case 3. Trashumance (shepherds recruitment)



	2011	2012	2013	2014	2015	2016	2017	2018
N.º animals	860	2000	4008	500	1148	374	600	2844
Economic impact per sheep								
during trashumance	77,14 €	21,45 €	18,94 €	50,60€	17,64 €	64,38 €	124,80€	16,74 €
Costs without Trashumance	29,76 €	16,23 €	27,05 €	27,05€	21,64 €	16,23 €	18,94 €	21,64 €
Diferencial	47,38 €	5,22€	-8,11€	23,55€	-4,00€	48,15 €	105,86€	-4,90 €



Principals Problems

- 1. Lack of qualified shepherds
- 2. Coordinate herds from different origins

Hidden Profitability.....

...Provisioning of ecosystem services?!?

- Clearing of the mountain
 - Maintenance of open spaces with low biomass content in the landscape for reducing fire risk
 - Safe havens for biodiversity adapted to this landscapes
- Respect of biological cycles:
 - Break at the holding of origin
 - Soil rest
 - Regeneration of trees Montado / Dehesa
- Sheep production:
 - Diet without changes (only grass all the year)
 - Excellent Body Condition (developing musculature)
 - Calving ease and lactation

"(...) Merino ewes all reported that BCS at breeding and/or mid-pregnancy was positively correlated with the number of lambs weaned per ewe exposed to the ram." Kenyon. PR; et al, 2014

Carbon Secuestration vs Real Costs



GUIDELINES:

- 1 Mountain Pass 1 Shepherd No more than 1000-1500 sheeps
- 2. Small herds from different origins No more than 1000 sheeps
- 3. 1 Mastiff dog for each 100 sheeps
- 4. 2 Border Collie
- 5. Large Knowledge of the mountain pass Qualified shepherds!!
- 6. Avoid calving during the transhumance

Requirements for a Real Future:

- Involve actively the Public Administrations:
 - Transhumance for the farmers
- Improve the infrastructure
- Qualified shepherds Improving the systems of Vocational Education and Training
- Dignifying the Shepherd profession
- Additional opportunities to the farmers (promote extensive livestock)
 - Climatic Change
 - Landscape management and culture
 - Sustainable and healthy food





Thank you for the attention!

