

Iberian Lynx Project Record¹

¹ Including projects on prey base and habitat which do not focus specifically on *Lynx pardinus* but do benefit it.

Basic Project Information:

Project Name: Use of mathematical models to evaluate the impact of Rabbit Hemorrhagic Disease (RHD) on wild rabbit populations and the effects of population management on RHD epidemiology: vaccination campaigns, translocations, predator control and habitat management.

Abbreviation: Theoretical approach to assay the reduction of RHD impact in wild rabbit populations

Project Institution: Gobierno de Aragon. Departamento de Medio Ambiente

Project Leader:

Project Website:

Start Date (year/month): 05/1

End Date (year/month): 05/12

Expected Duration: 1 year

Current Status: proposed active closed unknown

Notes:

Focus Level Countries:

Spain Portugal

Project Region:

Focus Level Taxa:

	Key focus	substantial	significant	small	unassessed
<i>L. pardinus</i> :	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>O. cuniculus</i> :	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other species:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

in situ / ex situ

Project Goals and Methods:

Abstract: Epidemiology of RHD, and therefore its impact on wild rabbit populations is highly dependent of rabbit population dynamics. On the other hand, several management tools, as vaccination campaigns, translocations, predator control and habitat management, are widely used to enhance rabbit populations in Spain and Portugal. However results have been negligible in the most of cases. There are evidences that management can increase the RHD negative impact on rabbit populations in any circumstances, but the effects of these managements on RHD epidemiology, and therefore on rabbit population growth have not been evaluated to date.

Project Goals: The main goals are (i) developing an age-structured mathematical model and evaluate the initial and ongoing impact of RHD under different rabbit population dynamics, including different levels of predation (ii) extending the model to assay different strategies of management as vaccination campaigns, translocation, predator control and habitat management to change rabbit population dynamics. (iii) to assay and determine the best combination sets of management tools to increase rabbit density.

Project Methods: Developing several mathematical models and carrying out theoretical approaches to rabbit population management.

Additional Information:

Activities:

Focus Level ► Activity ▼	Key Focus	substantial	significant	small	unassessed
<u>Habitat-related implementation:</u>					
<input type="checkbox"/> Protected Area management support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Land-use changes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Habitat or prey base restoration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Transboundary initiatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>People-related: Law enforcement:</u>					
<input type="checkbox"/> Law enforcement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>People-related: Opinion-formers:</u>					
<input type="checkbox"/> Networking and information sharing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Planning and policy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Advocacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>People-related: Living near the species:</u>					
<input type="checkbox"/> Personal involvement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Economic incentives/alternative resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Resolving human/carnivore conflict	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>People-related: General public:</u>					
<input type="checkbox"/> Education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Awareness and PR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Taxon-related implementation:</u>					
<input type="checkbox"/> Gene pool	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Re-introduction or supplementation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Translocation/rehabilitation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Disease control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Species utilization/management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Ecological research:</u>					
<input type="checkbox"/> Cat population surveys or monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Habitat/prey assessment or monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Spatial/temporal patterns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Predator/prey relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Population dynamics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Behavioural ecology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Human activities research:</u>					
<input type="checkbox"/> Human attitudes research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Taxon-related research:</u>					
<input type="checkbox"/> Veterinary research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Evolutionary research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Genetics research

Supplement to Research activities: Research techniques:

- | | |
|--|--|
| <input type="checkbox"/> Camera-traps | <input type="checkbox"/> Direct observation |
| <input type="checkbox"/> GIS-mapping/modelling | <input type="checkbox"/> Molecular analysis |
| <input checked="" type="checkbox"/> Population modelling | <input type="checkbox"/> Questionnaires/interviews |
| <input type="checkbox"/> Radio-telemetry | <input type="checkbox"/> Tracking/sign surveys |

Agency Involvement (Funding):

Agency	Year	Grantee	Amount	Notes
Gobierno de Aragon	2005			

Contacts:

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Additional comments/notes: