



LAYMAN Report

Life+IBERLINCE

Recuperación de la distribución histórica del Lince ibérico (*Lynx pardinus*) en España y Portugal
(LIFE10NAT/ES/570)



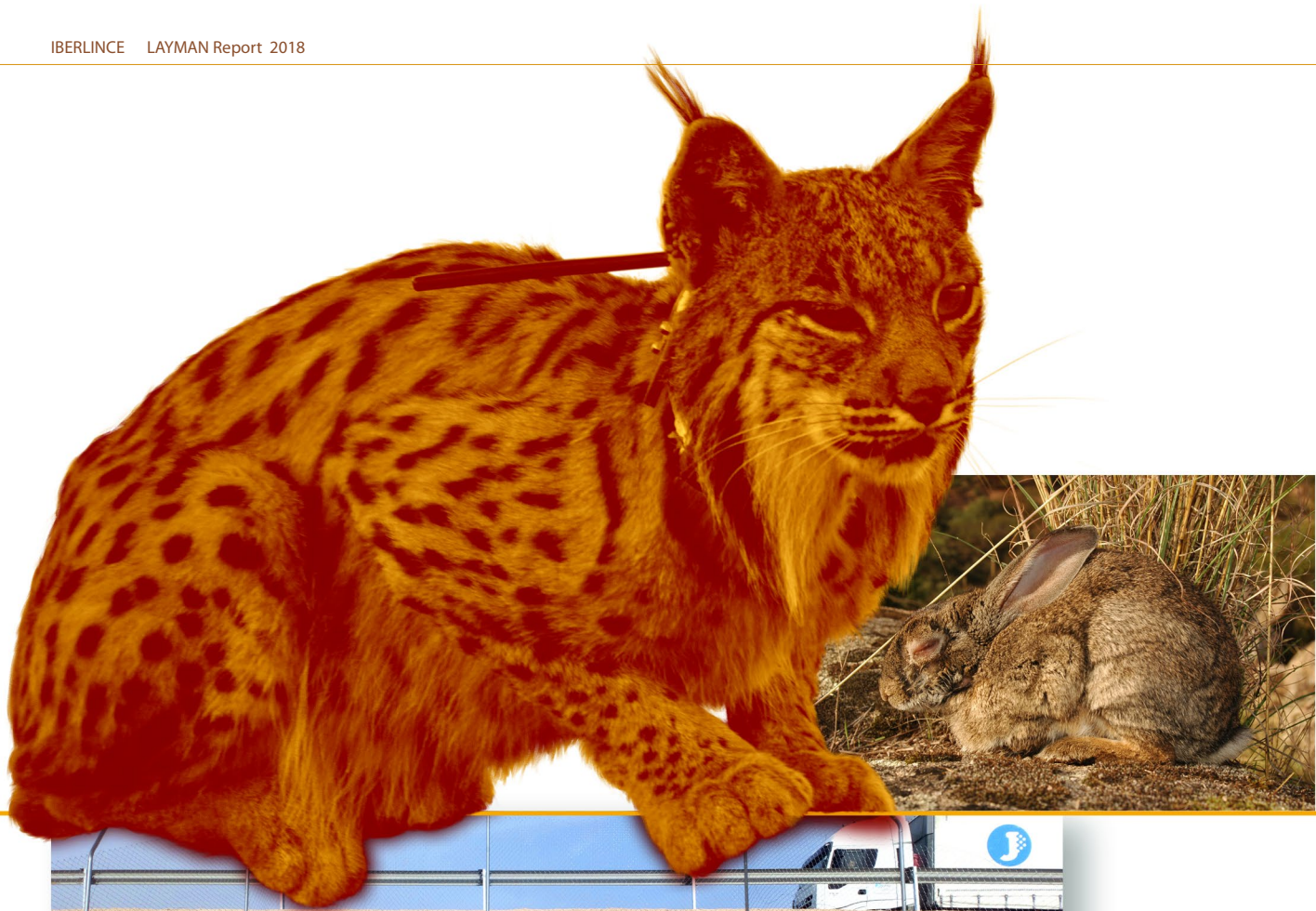
The Project Life+IBERLINCE 2011–2018



Life+ IBERLINCE is the third LIFE Project regarding Iberian Lynx (*Lynx pardinus*) conservation carried out since 2002.

The LIFE programme is the EU's funding instrument for the environment and climate action created in 1992.

Life+ Iberlince' main goal has been to improve Iberian Lynx population parameters in order for the species to meet the IUCN criteria to be down-listed to "endangered".



Reasons for the conservation of the Iberian Lynx

The Iberian Lynx is an autochthonous and endemic feline of the Iberian Peninsula, originally distributed all across the peninsular territory. It depends on the Wild Rabbit, its main prey.

During the 20th century, Iberian lynx populations suffered a dramatic decline due to four main reasons:

- The destruction of its main habitat, the Mediterranean forest.
- The decline of Wild Rabbit populations due to the emergence of two new viral diseases.
- Human persecution, as the Iberian Lynx was considered vermin.
- Human-related mortality causes, such as road deaths or drowning in wells.

The first national census of the species, completed in 2002, showed that there were only two remaining subpopulations, Doñana and Andújar, with a total population with less than 100 specimens. This led IUCN to change the Iberian Lynx threat category to “critically endangered”.





Goal

Improve Iberian Lynx population parameters in order for the species to meet the IUCN criteria to be down-listed from “critically endangered” to “endangered”.

Objectives

To increase the number of individuals in the current Iberian lynx populations, reaching 25 territorial females in Doñana-Aljarafe and 70 territorial females in the Andalusian subpopulations of Eastern Sierra Morena.

To establish four new Iberian lynx subpopulations of five territorial females per area in Portugal, Castilla-La Mancha, Extremadura and Andalusia.

Interventions

Selection of suitable reintroduction areas, sufficiently large, with high-quality habitat, high Wild Rabbit density, low risk of non-natural mortality and social support.

Release of genetically-selected, captive-born, Iberian lynxes into selected reintroduction areas.

Genetic reinforcement of consolidates subpopulations, mainly in Doñana-Aljarafe.

Monitoring of the individuals of every subpopulation, including health monitoring to avoid epidemical outbreaks.

The signing of collaboration agreements with managers and landowners of properties located within the Iberian Lynx distribution range, including reintroduction areas.

Habitat improvements and Wild Rabbit population reinforcement in those properties with a collaboration agreement.

Defragmentation works aiming at reducing the road-kill risk and eliminate black spots: build underpasses, the adaptation of drainage underpasses, fences, specific signals, etc.

Awareness and dissemination of the importance of the conservation of the Iberian Lynx in general and of the actions of the Project in particular, mainly those related to the local population, and the educational, hunting and livestock sectors.



Results

- A global population with more than 686 individuals, more than 160 of them being mature females (with data from 2018' uncompleted census).
- 27 mature females in Doñana-Aljarafe and 90 mature females territorial females in the Andalusian subpopulation of Eastern Sierra Morena, where Andújar-Cardena, Guadalmellato and Guarrizas form a functional metapopulation.
- Four new reintroduced subpopulations in Matachel, Montes de Toledo, Campo de Calatrava and Vale do Guadiana, all of them with five or more mature females.
- Some individuals have settled outside the areas where they were released; the first cases of connection have been registered, with a few individuals breeding in subpopulations other than those of their birth.
- Iberian lynxes born in Doñana-Aljarafe have increased their genetic variability due to genetic reinforcement.
- The Project has signed more than 300 collaboration agreements with managers and land owners of more than 266.000 hectares within the Iberian Lynx distribution range, including reintroduction areas.
- Habitat improvements have been implemented on these estates, in particular: construction of more than 15.800 shelters and more than 100 breeding enclosures for Wild Rabbits, thousands of hectares of pruning, clears, grass improvement and sowing, etc.
- More than 63.000 Wild Rabbits have been released to reinforce wild populations and alleviate RHD effects, and almost 33.000 domestic rabbits have been used for monitoring tasks (camera-trapping, etc.) and supplementary feeding of breeding females.
- Defragmentation works have been implemented in six black spots. An underpass has recently been finished in the A4 Highway, where 31 had kills occurred within Life+ Iberlince execution period. However, we must continue working on this highway in the future.
- Mortality due to diseases has decreased, probably thanks to an increase in the genetic variability of wild Iberian lynx due to genetic reinforcement.
- A big knowledge base on the management and conservation of the Iberian Lynx has been created. All this knowledge is collected in a series of statistical models, scientific publications, protocols and working manuals, which have been transferred to other national and international conservation projects.
- 2.495 public awareness and dissemination activities have been carried out, with the assistance or participation of 184.808 people.
- The Project has managed to involve society in the recovery of the Iberian Lynx and raise awareness of the importance of social participation in the conservation of endangered species.
- The Project has achieved a high media impact, with more than 5,000 appearances in general press (highlighting articles in the New York Times, Le Monde, Le Chaîne Info, El País, El Mundo, La Vanguardia, ABC) and in national and international TV channels, including specialized ones as BBC and National Geographic.

Summary of Interventions

Our main lines of work



Reintroduction

In 2010 started the reintroduction of Iberian lynx in those territories where the species had disappeared.

Coming from four breeding centres, reintroduced lynxes have contributed not only to the preservation of a genetic reserve to ensure the future of the species, but to recover some territories from where the species disappeared in the past.

3rd LIFE Project (current): 2011-2018

Recovering the historical distribution range of the Iberian Lynx in

the Iberian Peninsula

2nd LIFE Project: 2006-2011

Creating new populations in Andalusia (reintroductions).

1st LIFE Project: 2002-2006

Stabilizing existing populations

Junta de Andalucía starts the conservation works: 2000

94 specimens

177 specimens

310 specimens

686 specimens

2018 census (unfinished)



Collaboration agreements (Land Stewardship)

Direct social participation in conservation through collaboration agreements with landowners and hunting societies has been one of the fundamental factors for the success of the Project.

More than 270 landowners and gamekeepers managing more than 270,000 hectares are voluntarily involved in the conservation of the Iberian Lynx and its habitat, making the uses of their lands compatible with the requirements of the species and demonstrating how proper land management contributes to the values of the territory.

This collaboration has contributed to the increase in the number of lynxes and the foundation of six new populations.



Improvement of Wild Rabbit populations

Iberian Lynx and Wild Rabbit populations have historically evolved very closely. In fact, breeding success of the Iberian lynx is directly related to Wild Rabbit abundance.

For those reasons, the monitoring of rabbit populations and the interventions to improve its populations have played a key role in the improvement of Iberian Lynx populations.



Reduction of non-natural mortality

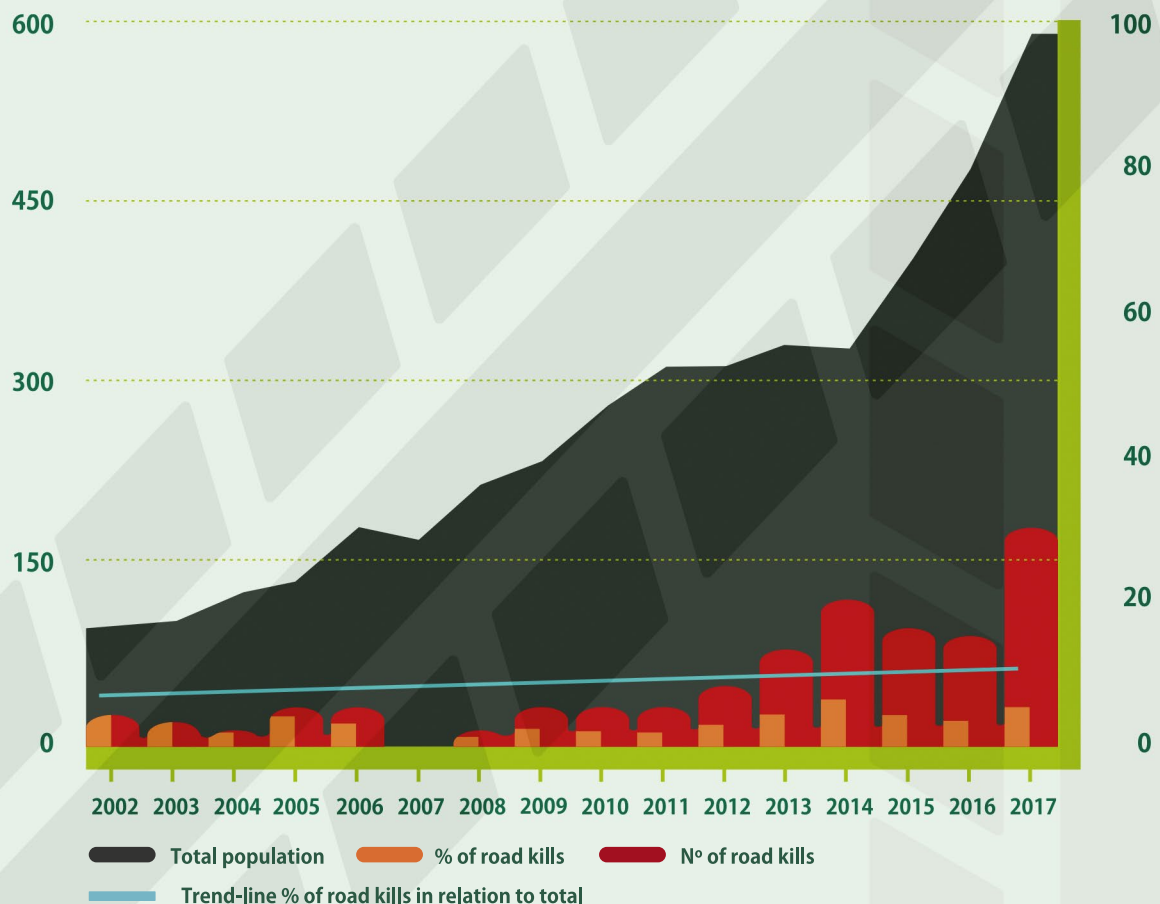
Most Iberian lynx deaths have a human-related cause, mainly by road kills and poaching. This non-natural mortality is one of the main threats to the future of the species.

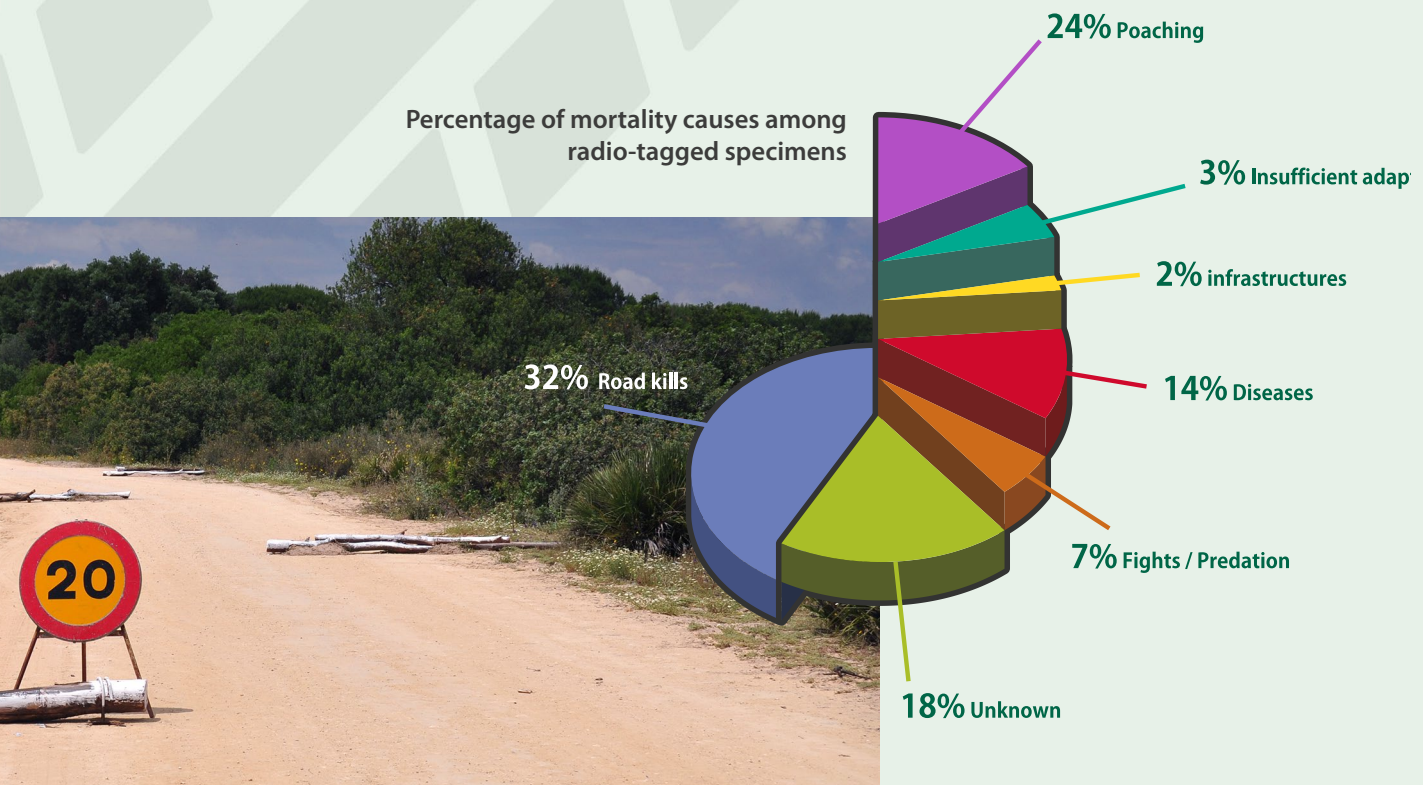
Road kills are a logical consequence of the high growth of Iberian Lynx population and the expansion of its distribution range in new, highly- fragmented, high-traffic areas. This fact is very unlikely to solve in the present situation.

Poaching events detected along Iberlince project have been more relevant in the reintroduction areas than in the historical areas. This has been one of the main challenges faced by the technical team of the project, which has made a high effort in public awareness to minimize conflicts among humans and the Iberian Lynx.



Relation between % of road kills and population size





Reduction of natural mortality

In 2002 the genetic variability of the two relict populations was the lowest ever recorded for a feline species. This high inbreeding was increasing the vulnerability to infectious diseases, among others.

The main strategy to fight this problem was the genetic reinforcement programme, which carried out the translocation of specimens among unconnected territories. Also, all reintroduced populations are managed to achieve maximum genetic variability in the wild.



Today, the genetic variability of the wild population is higher than that of the captive population, and in each subpopulation there are genes that come from the historic populations.

Public awareness and Communication

The project has carried out a huge effort of public awareness with the local people directly affected by the return of the Iberian Lynx to its former territories.

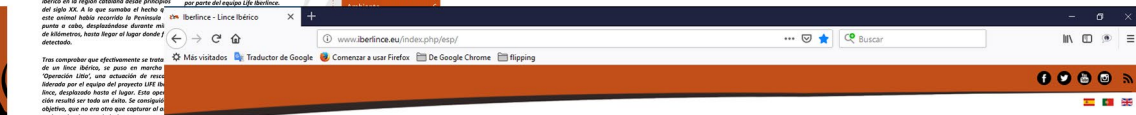
A total of 16 generic actions as a web page, the edition of diverse informative material of varied format, the edition of the magazine "El gato clavo", itinerant exhibitions, specific meetings, attendance to seminars, workshops and meetings, workshops on conflict resolution, events with a high artistic component, and so on.



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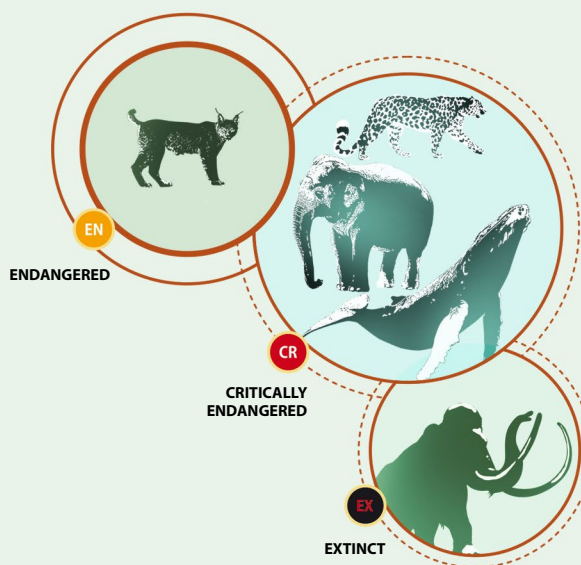
Results of the interventions

Efforts that achieve results

Progress in the number of wild-living specimens

Sixteen years after the first national census showing just two remaining populations with less than 100 lynxes in total, there are nearly 700 wild-living lynxes in Andalusia, Extremadura, Portugal and Castilla-La Mancha. Also, the species has been downlisted to “endangered” after a long period listed as “critically endangered”.

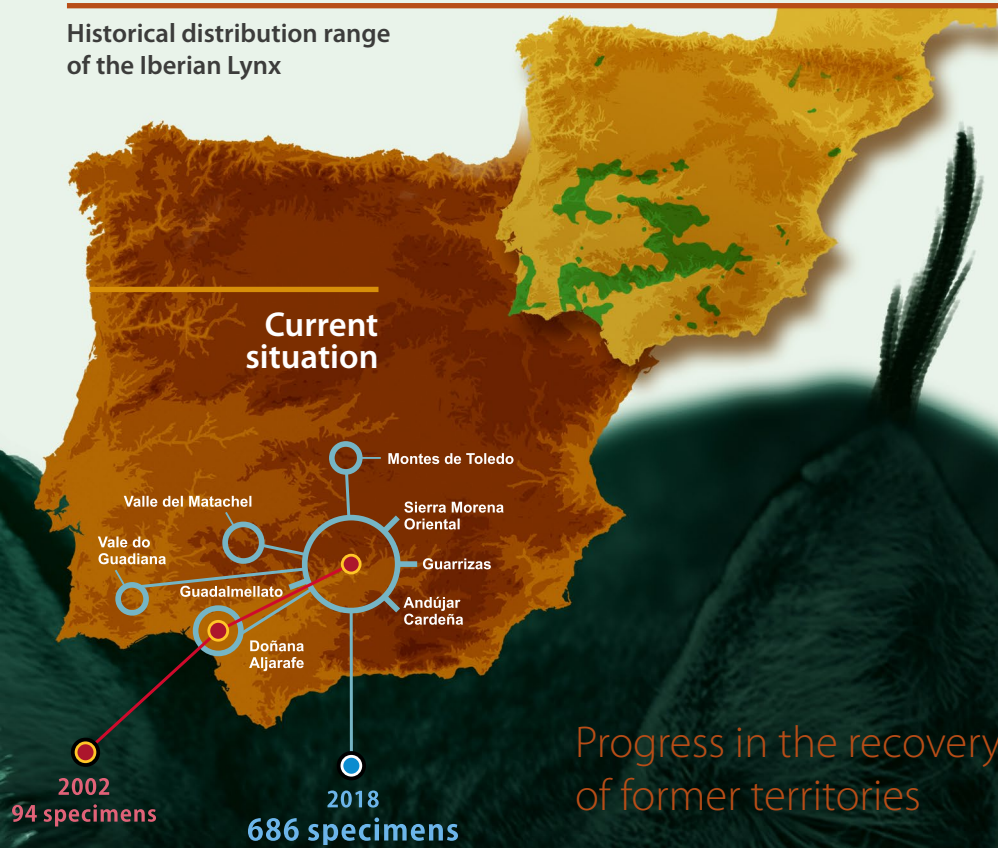
Though challenges remain there, the future looks more encouraging than ever for this singular feline.



Progress of the wild-living Iberian Lynx populations



Historical distribution range of the Iberian Lynx



Progress in the recovery of former territories

Reintroduction in Guadalmellato (Córdoba), Guarrizas (Jaén), Vale do Guadiana (Portugal), Valle de Matachel (Badajoz), Montes de Toledo y Campo de Calatrava has resulted eight subpopulations with at least five territorial females in each of them.

During these years the extension of territory with Iberian Lynx has increased from 125 to almost 3.000 square kilometres.

Results of the communication interventions

How we've told it

Iberlince webpage, with five million visits.

El Gato Clavo, a specific Iberlince magazine, with a total of 56 issues published.

We have attended 75 workshops, meetings, conferences...

15 general and specific publications, in different formats: books, good practice manuals, leaflets, posters...

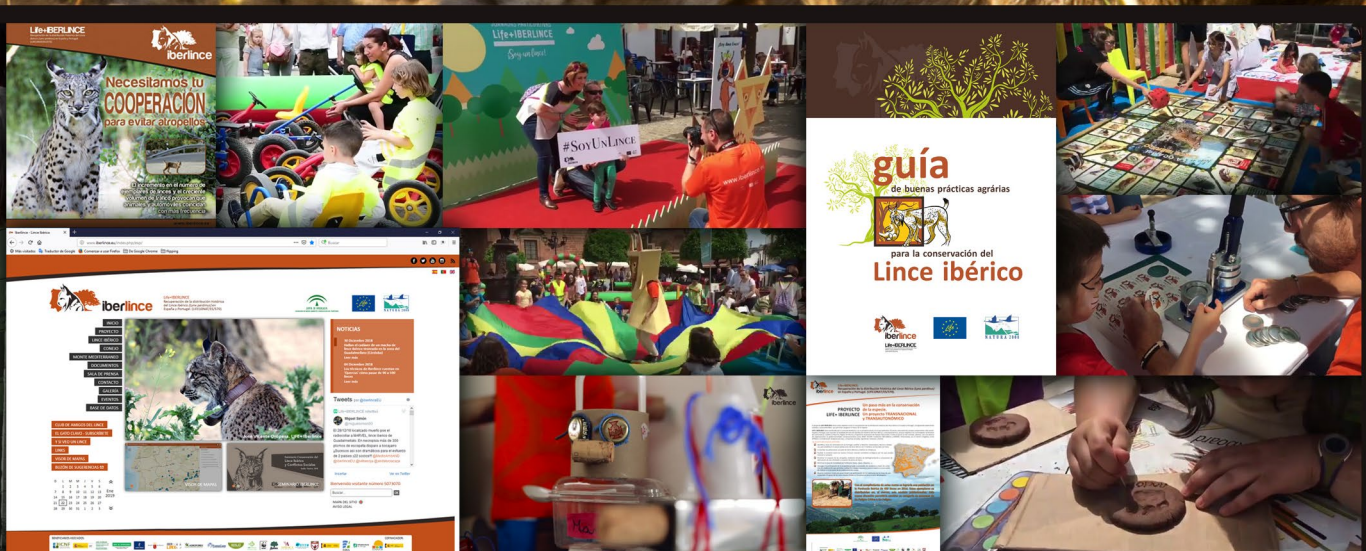
66 point of information in reintroduction areas and other areas of interest.

6 traveling exhibitions.

40 performances: participatory theatre and artistic and creative activities.

33 educational videos.





Length of the Project:

6 years and a half (September 2011-December 2018)

Total budget: 34.015.188 €

Beneficiary Coordinator:

Consejería de Medio Ambiente y Ordenación del Territorio.
Junta de Andalucía

Project Beneficiaries



Instituto da Conservação da Natureza e das Florestas (ICNF)



Organismo Autónomo de Parques Nacionales (OAPN) del Ministerio para la Transición Ecológica (Miteco).



Consejería de Medio Ambiente y Rural, Políticas Agrarias y Territorio de la Junta de Extremadura



Consejería de Agricultura de la Junta de Comunidades de Castilla-La Mancha



Dirección General de Medio Ambiente de la Comunidad Autónoma de la Región de Murcia



Consejerías de Fomento y Vivienda y de Agricultura, Pesca y Desarrollo Rural y Agencia de Medio Ambiente y Agua de la Junta de Andalucía.



Compañía Agroforestal de Extremadura (Agroforex)



Sociedad Española para la Conservación y Estudio de los Mamíferos (Secem)



Fundación CBD Habitat



WWF España



Associação para a Conservação do Lince-Ibérico e Desenvolvimento dos seus Territórios (Iberlinx)



Asociación de Propietarios Rurales para la Gestión Cinegética y Conservación del Medio Ambiente (Aproca)



Acajú: Comunicación Ambiental



Asociación para la Defensa de la Naturaleza de Extremadura (Adenex)



Fomento y Medio Ambiente de Castilla-La Mancha (Fomecam)



Federación Andaluza de Caza (FAC)



Ministerio de Fomento



Empresa de Desenvolvimento e Infraestruturas do Alqueva (EDIA)



Infraestruturas de Portugal (IP)



Câmara Municipal de Moura



Cofinanciador: Subdirección General de Biodiversidad y Medio Natural del Ministerio de Transición Ecológica



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