

Approach to Iberian lynx Conservation

Over the last century the Iberian lynx (*Lynx pardinus*) has disappeared from 99% of its former range (Figure 1) and their numbers have gone down by 90%. Since 2002 major conservation plans (LIFE-Nature financed projects) have taken place and for the first time in decades there has been an increase in both population numbers and area of occupancy.

Cristian Navarro

Pictures obtained from Iberian Lynx Exsitu Conservation Programme

Behind the decline

Habitat loss to agricultural intensification and forestry, food scarcity caused by the two major disease outbreaks (Myxomatosis and Hemorrhagic disease) along with direct human persecution are the main reasons of the decline.

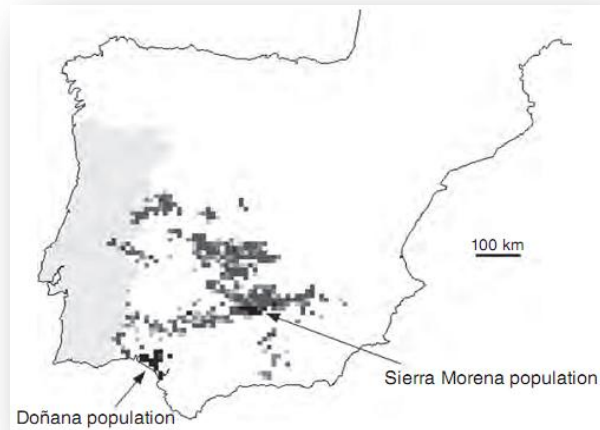


Figure 1. Distribution in 1950 (grey) and in 2002 (black) (Ferrerías et al. 2010).

Budget

Since major conservation projects started in 1994 €62.7 million have been spent up to 2011. A new project granted in 2011 has a budget of €34 million with which The LIFE team hopes to downlist the species from critically endangered to endangered by 2016. See total budget in Figure 2.

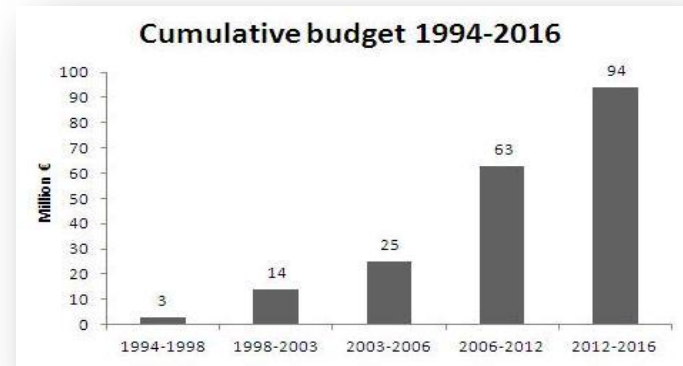


Figure 2. Cumulative budget of LIFE conservation programs from 1994 to 2016.

Iberian Lynx LIFE Project (ILLP)

LIFE conservation projects targets to restore lynx population:

- Improve lynx habitat by creating rabbit shelters, reducing hunting pressure over rabbits and restocking where necessary.
- Reduce lynx mortality by surveillance of illegal poaching, creating underpasses and ecoducts to reduce road kills and controlling infectious diseases.
- Increase public awareness with public campaigns done by all the parties involved.
- Create new nuclei in historical range by reintroductions for which a captive breeding program was created.

Results

- Population numbers have increased from 70 adults to aprox. 130 between 2002 and 2008 and the area of occupancy has increased by 410 km²
- Anthropogenic mortality has been greatly reduced: from 40% (1992-95) to 7.4% (2006-2010) in Sierra Morena and from 58.4% (1983-89) to 11.1% (2006-2010) in Doñana.
- Public awareness has increased and general public supports reintroduction sites.
- Two new nuclei have been successfully created through reintroductions in Guadalmellato and Guarrizas.
- Doñana's genetic diversity has been increased by translocations.

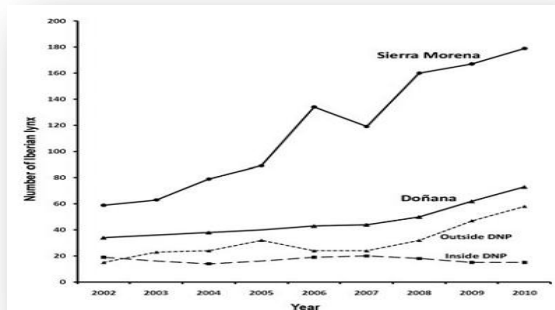


Figure 3. Minimum number of lynxes detected with camera trapping from 2002 to 2010 (Simón et al. 2012).



Picture: Lynx of the ex-situ captive breeding program

Conclusion

Without having yet a consensus over the meaning of the past decade increasing trend and whether it is thanks to the conservation measures, the fact is that the population and its range are increasing (Figure 3). Continuous and sound conservation actions are needed to bring the species into a stable situation in the future and the general public support is key.

References

- Rodríguez, A. (2012). Lince ibérico – *Lynx pardinus*. En: Enciclopedia Virtual de los Vertebrados Españoles. Salvador, A., Cassinello, J. (Eds.). Museo Nacional de Ciencias Naturales, Madrid. <http://www.vertebradosibericos.org/>
- Miguel A. Simón, José M. Gil-Sánchez, Gema Ruiz, Germán Garrote, Emil B. McCain, Leonardo Fernández, Marcos López-Parra, Eva Rojas, Rafael Arenas-Rojas, Teresa del Rey, Maribel García-Tardío and Guillermo López. 2012. *Reverse of the decline of the endangered Iberian lynx*. Conservation Biology 26:731–736.
- Pablo Ferreras, Alejandro Rodríguez, Francisco Palomares, and Miguel Delibes. *Iberian lynx: the uncertain future of a critically endangered cat*. Biology and Conservation of Wild Felids, chapter 24. 2010.