



Jaén: the main refuge for the world's most threatened feline

# The Iberian Lynx

**T**he Iberian lynx (*Lynx pardinus*) is a big cat with a spotted coat, a very short tail and distinctive paintbrush-like tufts of fur on its ears. This animal, a native of the Iberian Peninsula, lives in unpopulated areas of Mediterranean mountain and scrubland with a plentiful supply of rabbits. Glimpses of this magnificent feline are rare, as it hunts mostly at dusk and at night.

The Iberian lynx is currently the world's most endangered feline. Already in 1986 the IUCN (International Union for Conservation of Nature) listed it as in danger of extinction. In 1992, the European Union included it as a priority species and strictly protected (Directive 92/43/CEE). In the latest review by the IUCN, it is still listed as in Critical Danger of Extinction [5].

## Process towards extinction.

Around 1950, the Iberian lynx was widely distributed in the Iberian Peninsula, including Portugal. The estimated population at the time was at 4,000 to 5,000 individuals. Around 1988, the populations were more scattered, but their presence was still reported in Montes de Toledo, the Sierras of Extremadura, Sierra Morena and Doñana. They were also still found in Portugal. The estimated population was of some 1,100 lynxes, 350 of which would be adult females. 71% of the population was in the eastern Sierra Morena and Montes de Toledo [4].

In 1999 the situation became critical, and it was estimated that there were lynxes only in the eastern Sierra Morena (Jaén and Córdoba) (160 individuals), Doñana (40 individuals) [3], and possibly a very small population in Montes de Toledo. After this low point

there was a slight rise in the population, and in 2007 the populations of the two main groups, which at the time were confirmed as a stable presence and reproducing, were estimated at 50-53 individuals in Doñana and some 165-197 in the eastern Sierra Morena. To this we can add the 15 individuals recently found in Montes de Toledo.

In 2008, the Doñana population was estimated as 24-33 adults and the Cardeña-Andujar population (eastern Sierra Morena) as 60-110 adult lynxes [6]. As both populations are isolated, they are very vulnerable to extinction, and continue to be listed as in Critical Danger.

What were the causes of the alarming decline of the Iberian lynx?

The Iberian lynx specialises in hunting rabbits, which make up 90% of its diet. Therefore, it lives only where there are enough rabbits to be able to hunt at least one a day, while a female raising two cubs needs to capture three rabbits a day. This requires a high density population of rabbits.

Between 1954 and 1957 myxomatosis arrived in Spain from France. This viral disease affects rabbits, and at that time wiped out 90% of the rabbit population. In the following years rabbits gradually became more resistant to the disease. At the end of the 1980s, another new disease of rabbits appeared, known as Viral Hemorrhagic Disease. This period, with two illnesses affecting rabbits throughout the year, saw the greatest decline in numbers of the Iberian lynx. This coincided with other unfavourable circumstances such as changes in habitat caused by poor woodland management. In recent years, the main threats are being hit by cars on roads, the main known cause of

death [1], and there are still substantial threats such as the destruction, alteration and fragmentation of their habitat, Mediterranean scrubland and woods, by housing developments, dams, industrial or transport infrastructure, farming and timber plantations. The wild areas which remain are altered by more intense grazing and hunting, and bad management of woodlands [1].

Importance of Sierra Morena in Jaén for the lynx.

Of the two groups of lynxes now in existence, in Doñana and Sierra Morena (Córdoba and Jaén), the one with the best chance of survival, given the size of its population, area of occupation and possibilities of establishing new territories occupied by lynxes, is in Sierra Morena, in the part lying in the province of Jaén.

What has made it possible to maintain this population? There are certainly habitat and socio-economic characteristics which have allowed them to survive. But in this area, not only the lynx has been conserved, but threatened species such as wolves, imperial eagles, black vultures, black storks and others. This rich biodiversity is largely due to the traditional uses of these Sierras: livestock herding and hunting large game. Although it may seem paradoxical, it is mostly the large private estates kept for hunting where the fauna has been conserved best, along with large areas of native scrub and woodland. These ranges are strictly guarded, and hunts take place only once a year, depending on size; so they offer the right characteristics to preserve wildlife: guards, no disturbances, and in theory, conservation of the habitat.



## Lynx habitat in Sierra Morena.

A large area of this mountain range, in Córdoba and Jaén, is a very favourable habitat for the lynx. These are the areas influenced by the batholiths of Los Pedroches. The batholiths are granite outcrops eroded into rounded shapes, over floors of compacted sand, formed by the eroded granite. These rocky formations, the characteristics of the soil, and the good cover offered by scrub and pastures make an ideal habitat for the lynx and its main prey, the rabbit. The granite outcrops offer numerous rocky caves, used by lynxes as shelter and for raising cubs. The great majority of the territories occupied by lynxes in Andujar and Cardeña are found among granite outcrops. The granite formations of this part of Sierra Morena include soft soil, favouring the construction of burrows by rabbits, essential for the abundance of this prey species, and not found in the areas of slate and quartzite in other parts of Sierra Morena.

This means that the Sierra of Andujar offers the most promising situation in terms of quantity and quality of habitat for the survival of the Iberian lynx, and for this reason is now the most important area for this species.

But it is also necessary to restore nearby areas of similar characteristics, which today are degraded by poor management of woodland and pasture, or an imbalance of scrubland and pasture without much intermingling, favouring deer and boar for hunting.

We must all take responsibility for maintaining and encouraging this population of lynxes, the most important Iberian and world population, to stop the disappearance of this unique and beautiful animal.



## References

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