



Status, management and distribution of large carnivores

– bear, lynx, wolf & wolverine –

in Europe

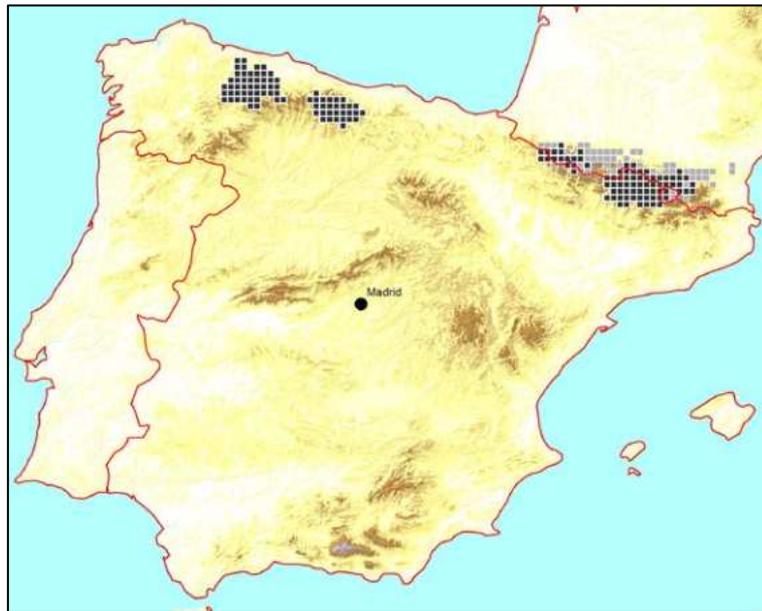
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- Part 2-

Bear – Spain

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"Deux populations : autochtone dans le massif cantabrique; réintroduite dans les Pyrénées une fois éteinte la population autochtone"



Bear distribution in Spain - Cantabria (BOIS 2005¹) for Pyrenees 2011.

*Dark cells: permanent presence
Grey cells: sporadic occurrence*

[Please note: neighbouring countries can have different criteria and time periods for the definition of cells with permanent and sporadic presences]

1. Distribution

Bears in Spain are found in 2 populations, the **autochthonous population of the Cantabrian Mountains** and the **Pyrenean population, re-introduced when the autochthonous population was almost extinct.**

In the Cantabrian Mountains, there are two population segments, the western one (mainly in the autonomous regions of Asturias and Castilla y León, but also in Galicia) and the eastern one (mainly in Castilla y León, but also in Cantabria and Asturias regions). Both segments are separated by some 50 km. The main areas of the western and eastern segments cover ~ 2800 and ~ 2100 km², respectively. The range in the Cantabrian Mountains is more or less stable.

The Pyrenean bear population lives in Spain, France and Andorra. In the Spanish Pyrenees there are a few bears in the western area (between Navarra and Aragón regions), but most bears live in the central population (between Aragón and Catalonia). The main Spanish bear range covers $\sim 4,200$ km². Five Slovenian bears were released in 2006, the range at that time was not consolidated yet, so the comparison with the area in 2007 is not possible.

2. Populations estimates & monitoring

Cantabrian Mountains

In 2010, 25 females with cubs of the year in the western and 3 in the eastern subpopulation were detected. To obtain total estimates, these figures might be multiplied by 8. An unpublished genetic study carried out by the Oviedo University and Doñana Biological Station found 195- 210 bears in the Cantabrian Mountains in 2006. These figures reveal an increase in the western subpopulation since 2007 and stability in the eastern one. In the longterm, the western population segment has shown an obvious increase (from 3 females with cubs of the year detected in 1994 to 25 in 2010) while the eastern one is stable or has slightly increased (Fundación Oso Pardo web page). In recent years, the

¹ BOIS = Bear Online Information System (<http://www.kora.ch/sp-ois/bear-ois/index.htm>)

presence of bears in the area between both populations has also increased, and genetic studies have detected at least one case of crossbreeding between a western male and an eastern female.

In order to monitor the population, from the late 1980s on, females with cubs of the year are counted both in the western and in the eastern population segments. The coordinated census is carried out mainly by technicians and wardens of the four autonomous regions (Galicia, Asturias, Cantabria and Castilla y León) and the NGO Fundación Oso Pardo (Palomero et al. 2007).

Pyrenees

The original Pyrenean bear population was reduced to only 5 bears by 1995. From 1996 to 2006, 8 bears coming from Slovenia were released in the Pyrenees. In 2011, there are around 2 bears (males) in the western Pyrenees (Navarra, western Aragón and the French side) and 20-25 bears in the central Pyrenees (eastern Aragón, Catalonia, Andorra and the French side), including at least 6 adult females. All the bears from the original population seem to have disappeared. The population has increased since 2007.

The monitoring of the population is mainly based on genetic sampling, but other methods are also used, mainly camera-trapping and monitoring of females with cubs of the year. Monitoring is done by autonomous regions staff and hired experts (Palazón et al. 2011a).

3. Legal status & relevant management agencies.

Bears in Spain are fully protected and its management is fully decentralized at regional level. The role of the Ministry of the Environment is to coordinate the autonomous regions.

In the Cantabrian Mountains, bear population falls under the jurisdiction of the autonomous regions of Galicia, Asturias, Cantabria and Castilla y León.

In the Spanish Pyrenees, bears are managed by Navarra, Aragón and Catalonia autonomous regions. In Catalonia there is an autonomous area, the Val d'Aran, which carries out the management of the bears by their own.

Since bears are considered Endangered in the National list of protected species in Spain, the autonomous regions must approve management plans. In addition, the Ministry of the Environment and the autonomous regions approved two National Strategies for Bear Conservation. However, these documents have no binding legal value.

4. Population goal and population level cooperation.

Cantabrian Mountains

There are four recovery plans (one from each autonomous region) and a National Action Plan coordinated by the Ministry of the Environment (Estrategia Nacional para la Conservación del Oso). The recovery plans and the National Plan have no quantitative population goals, but rather aim to recover the population as much as possible. The recovery plans delineate the critical areas, which are particularly protected. They usually include the best forests and the areas with concentration of winter dens.

Pyrenees.

In Spain there is an Action Plan for Pyrenean bears approved by the Ministry of the Environment in 2006. In addition, there is a Recovery plan for bears in Navarra autonomous region. The Ministry of Environment has the role of coordinating among the autonomous regions and with France and Andorra.

There is a formal cooperation agreement among the governments of Spain, France and Andorra. In addition, there are informal cooperation activities between the Spanish autonomous regions and France in order to use common methods in the monitoring, to use the same markers in the genetic analysis (but samples are processed in different laboratories). In addition, there is a technical coordination meeting every year with experts of the three countries.

5. Conflicts and conflict management

Conflicts exist over livestock depredation and destruction of beehives in both populations. Both in the Cantabrian Mountains and the Pyrenees, all the damages are fully compensated by the autonomous regions.

Cantabrian Mountains

In 2010, there were 606 cases of damages caused by bears to livestock, beehives and agriculture, 70% in Asturias, 26% in Castilla y León and the remaining in Cantabria and Galicia autonomous regions. Most of the damages were caused to beehives. In 2010, the four autonomous regions paid 321'000 € in compensations. In the Cantabrian Mountains, the main prevention measures, funded by the autonomous regions, are the electric fences to protect the beehives from bears.

Pyrenees.

In 2010, 25'500 € were compensated by the Spanish autonomous regions for 70 sheep killed and 29 beehives destroyed. After many conflicts with farmers in the past, in recent years the autonomous regions are spending a lot of money supporting farmers in bear range. The preventive measures include electric fences, livestock guarding dogs, cabins in the meadows for shepherds, a program to manage together the sheep scattered in high meadows, a subsidy for flocks grazing in bear area, etc. To implement these measures, the Catalan regional government alone spends 200'000 € every year (Palazón et al. 2011b).

6. Threats

Cantabrian Mountains

From 2006 to 2011, 7 cases of bear mortality have been detected. Two bears shot, 2 poisoned, 1 killed by traffic and 2 dead for unknown causes. The recovery of the eastern population segment is now the first priority. To stop non-natural mortality and habitat degradation are the main conservation needs. The translocation of females from the western population segment into the eastern one has been proposed

Pyrenees

From 2006 to 2011, one bear was killed in traffic collision. The reintroduction of bears in the Pyrenees triggered opposition in rural people, mainly farmers. The new actions to support farmers and other stakeholders are improving these attitudes, but a lot of work still has to be done. The release of bears in the Pyrenees in coming years is needed to have a self-sustainable population.

Réintroduction a déclenché opposition chez popul. rurale, notamment éleveurs. Actions pour aider ont amélioré la situation mais beaucoup reste à faire. Des lâchers sont nécessaires pour avoir une population viable /mais voir³ page suivante position Europe quant à ces lâchers/

7. Summary table

Population size	Cantabrian Mountains: 28 females with cubs of the year (2010). Genetic study (2006): 195- 210 bears Pyrenees (2011): 22-27 bears
Trend	<u>Cantabrian Mountains</u> : Increasing <u>Pyrenees</u> : Increasing after reintroduction
Distribution range (# cells in the 10 x 10 km EEA grid)	<u>Cantabrian Mountains</u> : Permanent: 77 <u>Pyrenees</u> : Permanent: 51
Range trend	<u>Cantabrian Mountains</u> : stable <u>Pyrenees</u> : Unclear
Depredation costs / year	<u>Cantabrian Mountains (2010)</u> : 321,000 € <u>Pyrenees (2010)</u> : 20,500 €
Number of cases / year	<u>Cantabrian Mountains (2010)</u> : 606 cases of damages <u>Pyrenees (2010)</u> : 70 sheep and 29 beehives
3 Most important threats	<u>Cantabrian Mountains</u> : small population size (eastern subpopulation), illegal killing, habitat disturbance <u>Pyrenees</u> : local acceptance, small population size, opposition to new reintroductions

References:

- Fundación Oso Pardo web page. Cuántos osos hay y dónde viven. <http://www.fundacionosopardo.org/ficha.cfm?idArticulo=151>
- Palazón S., Ruiz-Olmo J., Batet A., Alfonso I., Sastre N. y Francino O. y (2011a). El oso en Cataluña: La población se consolida. Quercus 304: 16-23.
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- Palomero G., Ballesteros F., Nores C., Blanco J.C, Herrero J., and García-Serrano, A. (2007). Trends in number and distribution of brown bear females with cubs-of-the-year in the Cantabrian Mountains, Spain. Ursus 18(2):145-157.

Les 3 plus importantes menaces: "acceptation locale, petite taille de la population, opposition à des nouvelles réintroductions".

C'est la raison pour laquelle l'Europe a décidé d'annuler les nouvelles réintroductions prévues après celles de 1995-96, cf. « LIFE and European Mammals: Improving their conservation status » - Luxembourg: Publications Office of the European Union, 2011, p. 42 : « a second planned reintroduction was cancelled due to opposition from local people ».

La Directive Habitats en effet non seulement ne rend pas obligatoire de telles réintroductions, mais, si de leur propre initiative les Etats membres les décident, elle les conditionne à une "consultation appropriée du public concerné" (art 22, voir aussi article 2b)