

Integral recovery of Bonelli's Eagle population in Spain

LIFE12 NAT/ES/000701











Bonelli



In Europe, **Bonelli's Eagle** (*Aquila fasciata*) lives in rugged Mediterranean habitats at elevations ranging from sea level to 1500 m.

Its favourite type of habitat consists of open land, with small copses and sparse tree coverage, in between fields of cropland and Mediterranean brush.

It normally nests on open rock faces and breeds from the beginning of February to the end of June, incubating its eggs for 37-41 days.

The chicks are fledged for 60-70 days and take to the air in mid-June, remaining in the local area until September.

The young eagles travel wide, but tend to return to where they originally hatched when they reach sexual maturity (at the age of 3-4).

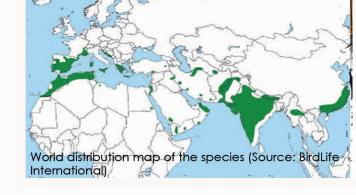
The young birds' propensity to disperse greatly hinders our knowledge of their behaviour and ability to apply effective conservation measures. As a result, a special effort needs to be made to monitor younger examples.

In nature, Bonelli's Eagle can live for 20-25 years and feeds on medium-sized prey which it catches either in flight or on the ground: rabbits, rats, lizards, corvids, seagulls, partridges, doves, raptors and other birds.

When of breeding age, the species is territorial, monogamous and sedentary. Its territory can range from 40 to 120km², depending on the availability of food.



In Europe, Bonelli's Eagle is considered an endangered species due not only to the small resident population (920 to 1100 pairs), but also the sharp decline in numbers observed between 1970 and 1990 throughout practically its entire distribution area.



The **Iberian Peninsula** is home to around 65% of the whole European population and the rest is unevenly scattered around the Mediterranean basin: France, Greece, Italy and Portugal.

The reasons for this downward trend in the European population include: direct persecution, electrocution caused by overhead power lines, disturbance of nesting areas and the loss and deterioration of dry grasslands and other habitats that young birds can spread into.





Bonelli's Eagle In the Iberian Peninsula...

The **Iberian Peninsula** is home to a total of 733-768 pairs, with good density figures in the south and east, and a scarce presence in other regions, such as Madrid, Álava and Navarre.

In Mallorca, the species became extinct in around 1970 as a result of the intense persecution of birds of prey widespread throughout Europe at the time.

In the 1970s, it was estimated that 7-8 pairs lived in **Navarre** and by the beginning of the 1990s this number had fallen to such an extent that there remained pairs in just three territories, of which only one is now inhabited.

This represents a decline in numbers of more than 75% in little more than three generations as a result of electrocution or collision and deliberate persecution. Conservation measures were first applied in 1991, legislation being passed to protect the species

and its habitats by adapting overhead power lines and taking measures to cut down on persecution and other negative activities.

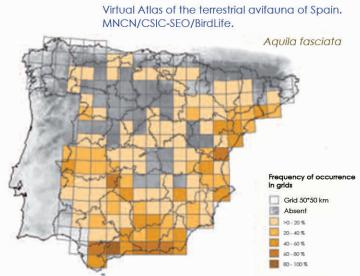
The population in the province of **Madrid** has also fallen by 80% over the last three decades, from an original 15 pairs to just two at present.

The main causes for the disappearance of the species are, as in Navarre, related to overhead power lines and the persecution of birds of prey.

The only breeding pair living in the Basque Country can be found in **Álava**, its territory also covering part of Burgos (Castile-León) and La Rioja.

This pair marks the northernmost boundary of the species' area of distribution on the Iberian Peninsula. Its disappearance in Álava is mainly attributed to habitat loss and disturbance and death at the hand of man. In Andalusia, however, the population has remained stable at some 354 pairs (almost half the Spanish population), mainly found in the Baetic Mountains, save a small proportion living in the Sierra Morena.

In addition to sustaining the largest geographical group in Spain, Andalusia, which forms a single population unit with



Murcia, is also currently home to the largest breeding stock of Bonelli's Eagle, making the region exceedingly important as far as the future of the species is concerned in the country.

In short, Andalusia, together with Valencia, Murcia and, perhaps, Toledo, Ciudad Real and Badajoz, has the only population of Bonelli's Eagle which can be regarded as stable, while the species may easily disappear in more central and northern regions (Aragon, Navarre, Basque Country, Castile-León, the north of Castile-La Mancha and Madrid) in just a few decades if the downward trend in numbers and poor breeding figures are not reversed.



A range of actions were implemented between 2010 and 2012 prior to the LIFE BONELLI project:

In Madrid, Navarre and the Balearics, examples from captive breeding (GREFA, UFCS-LPO) and nest rescue operations, together with arrivals at Recovery Centres (Catalonia, Valencia and Andalusia), were released into the wild.

The results are encouraging and the level of collaboration between the different Communities proved highly satisfactory.

This previous experimental phase encouraged the teams involved to consider the implementation of a project which took the Spanish population as a whole on a more formal basis, acknowledging the fact that the different population nuclei of the species behave as part of a single metapopulation, individuals moving from one region to another.





LIFE BONELLI is an attractive, innovative, long-term project, the first to contemplate the large-scale reintroduction of the species and unite several Autonomous Communities.

The **BONELLI project** (LIFE12 NAT/ES/000701) relies on funding from the European Union's financial instrument LIFE.

It aims to increase the Spanish Bonelli's Eagle (Aquila fasciata) population through programmes to strengthen the populations found in Madrid, Álava and Navarre, and reintroduce the species in Mallorca, where it became extinct last century.

The actions to be implemented as part of LIFE BONELLI between 2013 and 2017 consist of:

- The release into the wild of chicks hatched as a result of captive breeding, chicks rescued from their natural environment and examples treated at Recovery Centres.
- The restoration of quality habitats for the species.
- The adaptation of overhead power lines to minimise the risk they represent for the species.
- The raising of awareness among those sectors directly related to the conservation of the species and the general public.





www.lifebonelli.org

You can keep up to date with the progress of all the actions that make up LIFE BONELLI







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