



EFFECTIVE COLLABORATION METHOD BETWEEN NGOs AND GRID OPERATORS IN SPAIN



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1.- INTRODUCTION

The reinforcement of the red kite's (*Milvus milvus*) population in SW of Spain is an action implemented by AMUS in the framework of the Eurokite LIFE project, to promote the long-term conservation of the small and threatened population of red kite in this region.

Based on the IUCN Guidelines for Reintroductions and Other Conservation Translocations (IUCN/SSC, 2013), threats for the species involved in conservation translocation projects must be identified, detected and reduce or minimized to guarantee or improve the success of this action. For the red kite, electrocution with power lines is an important threat in Europe (Mattson *et al.*, 2022) and probably in wintering areas in Northern Africa (pers. obs), being an important step for the reinforcement project in SW Spain to try to reduce this threat.

2.- STUDY AREA

The area included in the feasibility study for the red kite's reinforcement covers 600.000 ha. in northern part of Huelva province (Andalusia region) and southern part of Badajoz province (Extremadura region), SW of Spain.

The habitat of the area meets the ecological conditions of the species from the point of view of orography, height, structure and density of vegetation, etc. The landscape is defined by extensive dehesas along with pasture, forestry and olive groves. This has allowed the existence of contrasts of vegetation cover, the alternation of thinned-out forests of holm oaks and cork oaks, with denser cover of these species accompanied by understory, areas of crops or pastures and shrubs. The mosaic landscape with significant forested areas, where silvo-pastoral use occupies a large part of the surface area, are conditions positively selected for by the red kite.

The release place is a private estate of 660 ha, in addition with two continue public estates with 16.000 ha. These estates have a 10 years wildlife conservation agreement with AMUS and they were selected, from 4 release places proposed, by the committee of experts of the project due to the best characteristics from the point of view of habitat, threats' control, food availability and social support.

3.- AIMS

With the goal of minimizing the impact of electrocution in the red kite's reinforcement project, it was established a collaboration between AMUS and E-Distribución, the electric company responsible for the power lines net in the area. This company has a plan to correct and isolate electric pylons in the study area, based on the regional and national legislation to prevent birds' electrocution.

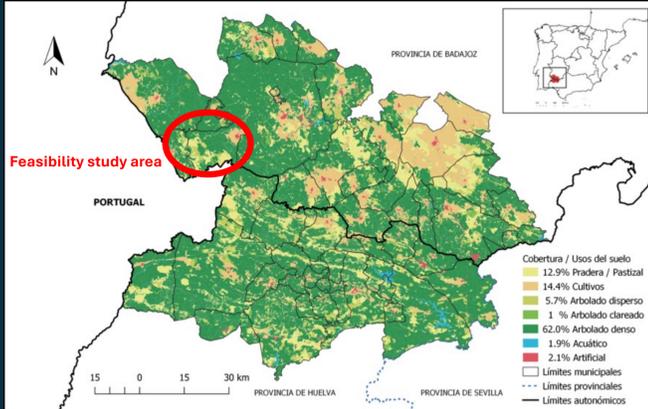


Fig. 1 – Map of the study area. The red circle indicates the releasing area selected for the reinforcement of the red kite in the SW of Spain, in the LIFE Eurokite project.



Fig. 2 – Wild red kite, in the SW of Spain.



Fig. 3 and 4 – Correction of an electric pylon, by E-Distribución, in the surroundings of the releasing area.



Fig. 5, 6 and 7 – Red kite released by the Eurokite LIFE project, with the wing tag X, in an electric pylon. On the left the electric pylon as before the correction by E-Distribución. On the middle and on the right the electric pylon was already been corrected and it was added a birds' perch, increasing the distance between the bird and the critical area of the pylon.

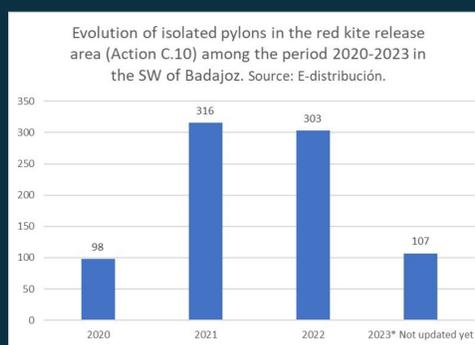


Fig. 8 – Number of isolated electric pylons in the releasing area, from 2020 until 2023. Source: E-Distribución.

4.- METHODOLOGY

There were two types of corrections :

A).- Urgent: When a bird was electrocuted, the pylon was isolated with covers adapted to each kind of upperpart pylon design. In the cases where the pylons were used frequently, additional birds' perches were installed at the top of the pylon with the goal of separate the birds of the dangerous components.

B).- Planned: Every year this company isolates randomly a number of electric pylons as a prevent measure to avoid birds' electrocution.

Based on this planification to correct electric pylons, several meetings between AMUS and E-Distribución established the priority to focus the correction of electric pylons in the releasing area and other areas with an intensive spatial use of the red kites detected throughout the GPS of each released bird.

5.- RESULTS

Several meetings between AMUS and E-Distribución added two new criteria to prioritize the correction of power lines in 2023 and after:

- To focus the correction of electric pylons in the red kite's releasing area and other areas with an intensive spatial use of the red kites detected throughout the GPS of each released bird.
- To prioritize the correction of dangerous electric pylons designs (pin-type insulators and jumpers, disconnectors and derivation of power lines) instead of the correction of all pylons of determinate power lines.

During the period 2020-2023, more than 824 electric pylons were corrected in the southern Badajoz province (Spanish Extremadura region). In the northern half of the feasibility study area for the red kite's population reinforcement (300.000 ha), 582 disconnectors and dangerous pylons have been registered and E-Distribución established a plan to correct 117 pylons/year during 2023-2027 period. The mid/long term result of this plan will correct all disconnectors pylons in this area.

6.- CONCLUSIONS

Being the electrocution an important threat for birds' conservation, it is possible and necessary to joint effort between electric companies, bird's conservation organizations and wildlife authorities to reduce or minimize the impact of power lines. In spite of public economical support to implement this action in many countries of the European Union and the existence of technology and material to isolate electric pylons, the collaboration and exchange of information between all stakeholders involved will improve the effectiveness of this measure and a better optimization of public funds to prevent bird's mortality.

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