



LAYMAN REPORT

LIFE-ZEPAURBAN PROJECT

Management of Urban SPAs in Extremadura for the conservation of Lesser kestrel (Falco naumanni)







Why?

Extremadura was the first region in Europe to consider urban environments as essential ecosystems for reproducing bird species, without them being considered priority habitats in the European Directives. The first exclusively urban SPA [Special Protection Area for Birds] was declared in 2003 and many more followed since then.

The LIFE-ZEPAURBAN project was conceived with the primary objective of developing an urban SPA management model to ensure the long-term conservation of the lesser kestrel that would be suitable for any urban area hosting colonies of the species.

Where?

Extremadura has 19 recognised urban SPAs [Special Protection Areas for Birds] thanks to the lesser kestrel (Falco naumanni). Over 50% of the Extremadura population of this small bird of prey live in these areas. These urban SPAs constitute the scope of the LIFE-ZEPAURBAN project.



Of the 19 urban SPAs, 9 are in Cáceres and 10 in Badajoz. They all have in common that they are in towns and cities with an unquestionable heritage value.

Thus, of all the buildings in Extremadura recognised as an "Asset of Cultural Interest" (ACI), at least 30 are home to lesser kestrel colonies and are within an urban area declared a SPA.

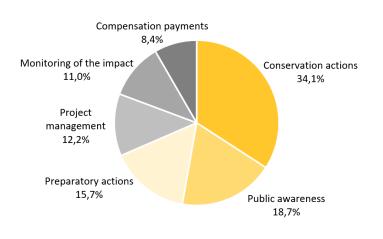
Besides the urban SPAs, the scope of action of the LIFE-ZEPAURBAN project includes another Natura 2000 Network site, the SPA-ZEC "Orellana Reservoir and Sierra de Pela", which includes a small part of the urban centre of the town of Puebla de Alcocer (Badajoz) where the lesser kestrel colony "Convento de la Visitación" is located.



How much?

Funding was sought to implement all the planned actions from the LIFE Programme, a financial instrument of the European Union dedicated to financially supporting environmental and climate action projects. The LIFE Programme co-financed almost 75% of the initial budget, and the partners contributed the rest.

- Total budget: €2.779.810
- LIFE funding: €2.054.120 (73,89%).



Economic distribution by group of actions

When?

The project started in September 2016 and was scheduled for completion in December 2020, but due to the COVID-19 pandemic, many actions planned for 2020 were brought to a standstill, and the project had to be extended until 31 August 2021.

In total, the project has lasted 60 months.

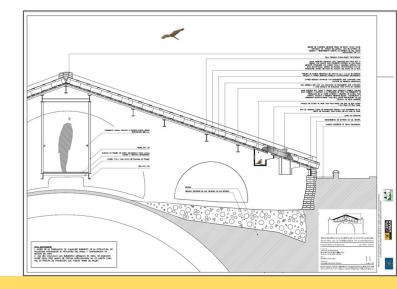
Who?

There were nine partners in this project, representing both the main players in conserving the lesser kestrel within the regional administration and several professionals specialised in crucial aspects:

- The Directorate-General for Sustainability is in charge of Nature Conservation and Protected Areas and acted as a coordinating partner.
- The Directorate-General of Libraries, Archives and Cultural Heritage protects Extremadura's historical and cultural heritage. Their work includes the conservation, rehabilitation and maintenance of buildings with heritage value.



- The Directorate-General for Tourism promotes and manages tourism in Extremadura, developing numerous initiatives based on birdwatching tourism, such as the "Birding in Extremadura Product Club".
- **INTROMAC** is a consortium of the regional public sector whose mission is to improve the competitiveness of companies in the construction and ornamental rock sector in Extremadura through technical services, I+D+i projects and scientific-technical dissemination.



- **Prefabricados Extremadura 2002** has over 10 years of experience manufacturing and selling imitation wood concrete and artificial stone products for structural and decorative elements in housing.
- Laruinagráfica is a creative and multifaceted studio that offers professional analysis, creation, communication, publication and dissemination of all kinds of content, with particular attention to the tourism and environmental sectors.
- **Terra Naturalis** is a non-profit organisation that aims to preserve nature and foster demonstration projects, cultural heritage and sustainable development.
- **DEMA** is an NGO created in 1990 to protect natural areas and raise public awareness of the need to conserve them. It specialises in the conservation of the lesser kestrel.
- FOTEX is a local Extremadura company with experience in studies and projects to conserve protected wild species.

Which?

Five specific objectives were set to achieve the main objective, for which 30 actions were proposed.

Objective 1: Improve the conservation and management of lesser kestrel colonies in urban SPAs
Initial census in urban SPAs and roosting sites.
Assess the effectiveness and design of census methods in urban areas
Adapt nesting substrates in heritage buildings in SPAs
Manufacture cork-mortar nests industrially
Hold training workshops for construction companies
Captive breeding and reinforcement of colonies at risk of extinction
Support municipalities in developing urban planning regulations
Draft and approve the Plan for the Conservation of the Lesser Kestrel Habitat in Extremadura
Review boundaries, declare and zone new SPAs

Objective 2: Ensure the conservation of the feeding habitats that the urban populations depend on

Conduct a survey and characterise feeding and roosting habitat.

Ensure compensatory payments to farmers and stockbreeders

Start up a pilot project to improve the quality of feeding habitats.

Objective 3: Develop tourism experiences based on the lesser kestrel

Create a tourism product based on the Lesser kestrel.

Disseminate and foster the tourism product.

Develop a mobile application for the tourism product

Objective 4: Raise awareness of the conservation problems of the species and get their involvement in solving them

Record and edit audio-video material.

Create the project image and communication.

Develop project information material.

Conduct an awareness and information campaign

Install webcams in colonies

Objective 5: Develop a replicability strategy

Develop a replicability strategy and network with similar projects.

Hold an international congress on the conservation of the Lesser kestrel.

Other actions to achieve our objectives:

Project coordination.

Scientific Committee of the project.

Monitor the impact of the project's conservation actions on urban SPAs in Extremadura.

Monitor the socioeconomic impact of the project.

Project progress indicators.

Impact of the project on ecosystem functionality.

Post-LIFE conservation plan.

How?

The LIFE-ZEPAURBAN project has taught us a lot about the Lesser kestrel and answered many of the questions raised at the beginning of the project.

What were the problems?	Solutions we have found
What can we do to ensure the restoration work on historic buildings considers the nesting of the lesser kestrel while respecting the historical heritage?	By creating an action protocol between the Directorate-General for Sustainability and the Directorate-General for Archives, Libraries and Cultural Heritage to consider the criteria to maintain both the natural and historical heritage.
How do we avoid competition with other species, predation and chicks falling out of their nests in our municipalities?	By designing a nest model that provides better characteristics to increase the species' reproductive success.
Can we recover vanished urban colonies?	Thanks to the reintroduction of Lesser kestrel chicks in the extinct colony of the church of San Vicente de Alcántara, 13 pairs have been seen flying and breeding again in the town centre.
Can a legal standard for conserving the Lesser kestrel in urban and rural areas in the whole region be created?	The Lesser kestrel Habitat Conservation Plan has been draft, which considers rural and urban populations and their feeding areas, facilitating their management and ensuring their conservation.
Could municipalities with urban SPAs favour the conservation of lesser kestrel colonies?	All the town councils with urban SPAs have been involved and have included measures for the conservation of the species in their urban planning regulations.
Is there a feeding ground management model that benefits the Lesser kestrel?	Several habitat improvements were implemented to determine the extent to which the species accepted them and identify the types of grasslands, pastures and fallow land they prefer.
Could the Lesser kestrel attract tourism in Extremadura?	The Urban Birding tourism product has been created. Local businesses use the Lesser kestrel as a tourist resource in urban SPAs, combining it with historical and heritage tourism.
Can the locals participate in lesser kestrel conservation work?	With the slogan "You can't love what you don't know, nor defend what you don't love", talks, guided tours, activities in schools, associations and groups have been organised to raise awareness of the vital role of the lesser kestrel in our SPAs.





OUR PROJECT IN PICTURES

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OUR ACHIEVEMENTS IN NUMBERS

762	pairs in the project area in 2021. It has increased by more than 30%.
1.000	nest boxes made, 750 placed all over Extremadura.
697	putlog holes adapted for Lesser kestrels.
108	nest under roof for Lesser kestrels.
22	platforms installed for White storks.
215	adapted putlog hole for bats and swifts.
35	construction companies trained to adapt the measures developed during the project.
217	chicks released in San Vicente de Alcántara SPA.
19	local councils have included measures for the conservation of the lesser kestrel in their regulations .
4	proposed new urban SPAs .
89	tagged specimens from 3 colonies in urban SPAs with GPS and satellite transmitters to learn more about the species and its feeding grounds.
33	agreements with owners and managers of farms for the realisation of more than 500 ha of habitat improvements.
69	tourism experiences created for the Urban Birding product catalogue, and 56 tourism operators .
60	Promotion of the tourism experiences catalogue in more than 60 national and international tourism fairs and events.
36.500	visits to the website at the end of the project and over 3.500 downloads of the material created during the project.
170.000	units of material were produced: stickers, posters, informative leaflets, folders, pens, catalogue of tourist experiences, maps of urban SPAs, brochures on chicks falling, children's games, etc.
5.000	participants in dissemination activities: more than 180 presentations and talks, more than 50 guided visits to urban SPAs and 17 workshops to raise awareness of urban SPAs, Lesser kestrel and the LIFE-ZEPAURBAN project.

WHAT ARE WE MOST PROUD OF?

- A lightweight nest has been created. Their beneficial characteristics increase breeding success, avoid predation and competition with other species, and insulate against extreme temperatures.
- The Urban Birding product has been created, an example of sustainable tourism and the first based on the lesser kestrel and the historical and cultural heritage in five pioneering localities: Trujillo, Zafra, Cáceres, Plasencia and Jerez de los Caballeros.
- Experience in reintroductions in a vanished colony has proven effective from the first year in San Vicente de Alcántara. After 4 consecutive years of releasing specimens, the colony at the church has grown to 10 pairs after over 20 years of disappearance.



- One of the most outstanding achievements has been the coordination and understanding of the different administrations, companies and professionals to execute works in buildings of heritage interest. The ongoing cooperation of the owners and managers of the buildings has contributed towards completing the works.
- A detailed action protocol has been implemented for works in buildings with lesser kestrel colonies, including the lesser kestrel as a "work unit" in building restoration projects to favour their nesting.

- Thanks to the marking of specimens with GPS and satellite transmitters in three very representative colonies, we have learnt the exact feeding areas, the average distances travelled to feed, their dietary preferences and other fascinating biological questions for the conservation of the species. Agreements have also been made with owners and managers of estates where these specimens were feeding to make habitat improvements and check which ones they liked best.
- The locals became involved in many of the actions carried out during the project, highlighting their cultural and natural heritage and bringing it together thanks to the project through awareness-raising among schoolchildren, training workshops, participation in festivals and fairs of various kinds.
- The 8th International Congress for the Conservation of the Lesser Kestrel was successful in terms of participation, with over 50 speakers and 298 registered participants. Interesting conclusions were drawn about the species and its conservation.
- A "Conservation Plan for the Lesser Kestrel habitat in Extremadura" was drawn up, both for urban and rural colonies, which included measures based on the experience of this project.
- The number of urban SPAs is growing within the Natura 2000 Network, and the first outside Extremadura to be declared were in Almodóvar del Campo and Tirteafuera (Ciudad Real). There are several proposals in Andalusia that will soon become a reality.



What do people think?

Social impact: The locals are happy with their kestrel neighbours.

95% of the local population claim to know what a Lesser kestrel is. If we take for granted that one must "know in order to love", this first condition has been achieved in the lesser kestrel's case.

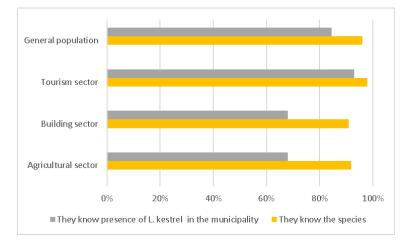
82 % of the locals are aware of the presence of the species in their towns, and they consider the lesser kestrel to be a tourism asset, followed by its environmental value.

71% of the locals know that the lesser kestrel is a protected species, and 53% know that there are protected areas in urban areas.

The locals do not believe that the species' nesting adversely affects buildings (67%) but works on roofs and buildings threaten the species. 86% of the participants think it would be good to create or adapt sites to facilitate nesting, and 78% would welcome financial support for private individuals to carry out works to improve the nesting habitat of the species.

Regarding how much the LIFE-ZEPAURBAN project is known, 57% of the final participants say they know about it, compared to 31% in the initial stages of its development. However, up to 85% awareness of the project has been achieved in the tourism sector.

As for the results that the LIFE-ZEPAURBAN project should bring about, most agree that it should help consolidate or increase the populations of this species.



Economic impact: Urban Birding tourism product.

Although restrictions due to COVID-19 slowed tourism activities just when the *Urban Birding* product was launched, it has been very well received. In the last Tourism Experiences Catalogue published in 2020, there were already 56 tourism agents, including private companies and local entities.



The services offered by the tourism product include a wide variety of activities and routes, accommodation and gastronomy, with the Lesser kestrel in urban SPAs being the main focus and the resource on which they are based. The options are varied and include painting workshops, exceptional guided tours, accommodation and restaurants with views of the colonies, local gastronomy (ham, olive oil, olives, wines, sweets, etc.), etc.

The Urban Birding app has been created, which includes all the tourist experiences and routes to visit the Lesser kestrel colonies and the sites of greatest heritage value in the towns where it has been implemented (Trujillo, Zafra, Cáceres, Jerez de los Caballeros and Plasencia). Download via the App Store.

And what are we going to do next?

To ensure the project continues, we have planned several actions, among which the following stand out:

- For the management of urban SPAs: carry out a regional census in 2022, continue monitoring the occupation of the nesting substrates and apply the protocol to ensure the combination of cultural and natural heritage; and manage the stock of 250 cork-mortar nests available for installation in projects of the Regional Government of Extremadura and in other projects that need it. Once exhausted, the plan is to purchase more nest boxes to continue installing them in other locations. Ensure compliance with the town councils' urban planning regulations and the Conservation Plan for the Lesser Kestrel habitat in Extremadura, prioritising its dissemination among the main players involved.
- For the management of feeding areas, agreements will be maintained in some farms and the monitoring of marked birds. The preferences of other colonies will be studied, for which purpose we will mark specimens in other SPAs. Work will be carried out with the Directorate-General for Community Agricultural Policy to ensure that the recommendations and proposals put forward during the project can be implemented. Efforts will be made to prioritise existing aid or create new ones to benefit the management of the lesser kestrel's feeding habitat.
- For the tourism product, the Urban Birding product will be promoted, training will continue, workshops and benchmarking with member companies will be held, and the product will be promoted at national and international fairs and events. New locations and tourist experiences will be added to the *Urban Birding* product to enrich the offer at a regional level and promoted accordingly.
- For dissemination and replicability, we will continue training professional groups, town councils, construction companies, and anyone involved in executing and designing works in buildings of interest to the Lesser kestrel.

Besides, prior and on-site advice will continue to be provided for any actions promoted by public administrations (Regional Government of Provincial Extremadura, Councils, town councils) or private individuals in buildings housing lesser kestrel colonies. Manuals and informative videos on managing buildings with lesser kestrel colonies will be published, aimed at construction companies mainly and technicians involved in executing works. The protocols for action agreed between the Directorate-General for Sustainability and the Directorate-General for Archives, Libraries and Heritage will be extended nationally and internationally for application in projects with similar characteristics.

The learning guide created during the project will be the basis for continuing teacher training in the Teacher Training Centres (CPR) of Extremadura during the 2021/2022 school year. The value of the Lesser kestrel will continue to be highlighted through educational content in the Ecobus, mobile classroom of the Regional Government of Extremadura touring the whole region, and travelling exhibitions, both in schools and the interpretation centres of the region's protected areas. An informative presentation has been prepared with the main results of the project, aimed at the local population of the urban SPAs, the companies involved in the Urban Birding product and other interested groups.

On the website www.lifezepaurban.com, you will find the most updated information on the project, including the possibility of downloading all the materials published, the main results obtained in each action and other documentation of interest.





With the contribution of the LIFE Programme of the European Union



Coordinating Partner:



Beneficiary Partners:

JUNTA DE EXTREMADURA

Consejería de Cultura, Turismo y Deportes



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