The Albuera wetland in the Extremadura region consists of a series of temporary Mediterranean ponds of endorheic (closed basin) nature surrounded by a holm oak forest. The wetlands include three habitats that are considered a conservation priority: temporary Mediterranean lagoons, Thero-Brachypodietea steppes and Limonietalia saline Mediterranean steppes.

The wetland is a very important stopover point for migrating birds, who also use it for breeding and wintering. The high ornithological diversity (160 bird species, out of which 44 are EU-listed) is due to the presence of different biological communities, in which species connected to different habitats converge.

The lagoons suffer from a natural silting-up process, which has speeded-up in the last few years because of human activity. Overgrazing was the main conservation threat, particularly on the shores of the lagoons. Transformation of saline steppes into agricultural land or industrial sites was also a potential menace, as was poorly planned forest planting.

Objectives

The project's aim was to restore the La Albuera wetland habitats by stopping the human activity-induced silting-up of the lagoons. The project also aimed to restore the natural watercourses between the lagoons, in order to ensure the sustainability of the conservation measures, and to increase the biological
diversity of the shorelines.

To achieve these goals, the project drew up a management plan for La Albuera. The challenge was to safeguard conservation of its natural value while maintaining agricultural activity in the area. The project also carried out a socioeconomic survey to assess the costs of conservation and habitat management. Arable and pasture lands would rented in order to preserve the characteristic flora of the temporary Mediterranean lagoons. Hunting in the area would be regulated to ensure compatibility with habitat conservation.

Results

Despite the outstanding natural value of La Albuera, at the start of the project, the conservation status of the lagoon complex was threatened by a number of damaging activities. Private landowners used the temporary lagoons for crop-planting and livestock when they were dry. This – as well as silting processes – led to the lagoons being treated as extensions of the surrounding agricultural land, thus destroying the original habitat.

To rectify this, the project carried out the following actions across three lagoons, and partially put in place measures for other lagoons:

- Carried out the first in-depth hydrological and geological studies of the area, setting a basis for subsequent management. Project actions were then designed accordingly. The studies also helped determine the connections between the lagoons and the catchment area of the river Valdegrana. This could potentially result in the lagoons being considered public property and made subject to water regulations. At the outset of the project, because of their endorheic (closed) nature, the lagoons were regarded as rainwater catchment areas and not subject to water regulations.
- The study resulted in the discovery of a new saline steppe close to La Albuera village, where forestry was practiced. This area was under the project ceded for conservation purposes and was fenced to allow the natural recovery of the saline flora.
- The project carried out socio-economic studies to assess the position of people living in the area. One of the most relevant outcomes of this was identification of activities that could be carried out in the area profitably while still respecting conservation aims.
- The original connections between lagoons were restored (helping maintain their water holdings for longer periods) and shorelines were restored to combat silting and to enable the original vegetation to recover. A deal was done with farmers, with construction of watering points for livestock in exchange for not allowing cattle to enter the lagoons. Vegetation diversity was restored to encourage bird species, and certain lagoons were fenced-off. An observation tower for bird-watching was also built.
- Measures were taken to prevent sowing of crops during wildlife breeding periods.

The effectiveness of the measures taken has been shown by an increase in the number of steppe birds (such as Otis tarda, Tetrax tetrax, Burhinus oedicnemus and Pterocles orientalis), and of aquatic birds. Meanwhile, long-term measures were put in place with respect to local landowners. Under a new regional decree
Farmers in the area can now apply for grant aid for conservation of habitats. Such measures have been relatively simple to implement and have contributed to reversing the deteriorating condition of the area. Communication measures such as talks between farmers and local officials, and establishing public access to some of the lagoons, have greatly helped the project be effective.

During the project, in fact, farmers showed they were willing to implement more sustainable management practices. Much time was spent encouraging collaboration between landowners and authorities, which helped farmers accept the measures taken by the project. Farmers even proposed and implemented additional measures. Some farmers did decline to participate in the project's activities, but it is hoped that gradually in the post-project period, wider participation can be encouraged. The project put in place a management plan that should ensure suitable habitat management in the area in the future.

Further information on the project can be found in the project's layman report and After-LIFE Conservation Plan (see "Read more" section).

An ex-post visit was carried out in June 2017 by the LIFE external monitoring team, nine years after the project closed. This concluded that the LIFE project had greatly contributed to the recovery of the natural structure and ecosystem functions of the internationally-important La Albuera lagoon complex, and to improving the conservation status of several habitat types and species listed in the Nature Directives. Without the project, irreversible deterioration of some of the lagoons would probably have occurred. Some of the main threats have disappeared or have been substantially reduced thanks to measures put in place during the project. These measures have been maintained through the Management Plan (approved in 2009) and effective stakeholder involvement. The ex-post visit found that the project has been a useful tool for supporting the long-term implementation of good RDP agri-environment practices, though there is a need for continuing technical support and funding schemes. There has been a widespread decline at the regional level in populations of great bustard (*Otis tarda*) and little bustard (*Tetrax tetrax*), and this makes assessing the long-term impact of the project on bird species difficult. These declines may be due to measures in the new Common Agricultural Policy (CAP 2014-2020), and the ex-post visit helped identify several problems arising from the new CAP conditionality measures in Extremadura, such as the economic penalisation of practices necessary for the conservation of protected habitats and species. A valuable result arising from project actions has been the recent inclusion of a ban on agricultural work in temporary lagoons within CAP conditionality measures, and the wider precedent this sets. The LIFE project was a turning point in raising the awareness of the local population about the natural and cultural importance of the lagoon complex in the Natura 2000 network. In particular, the Town Council of La Albuera has continued to actively disseminate information about the wetlands and the saline steppe, to boost tourism and mobilise other sources of funding.
Environmental issues addressed:

Themes

Species - Birds
Habitats - Coastal

Keywords

environmental impact of agriculture, migratory species, protected area, wetland, land purchase, management plan, restoration measure

Target species

Burhinus oedicnemus  Elanus caeruleus  Glareola pratincola  Otis tarda  Pterocles alchata  Tetrax tetrax

Target Habitat types

- 9340 - Quercus ilex and Quercus rotundifolia forests
- 1510 - Mediterranean salt steppes (Limonietalia)
- 3170 - Mediterranean temporary ponds
- 5330 - Thermo-Mediterranean and pre-desert scrub
- 6220 - Pseudo-steppe with grasses and annuals of the Thero-Brachypodietea

Natura 2000 sites

SCI  ES4310003  COMPLEJO LAGUNAR DE LA ALBUERA
SPA  ES0000398  Llanos y Complejo Lagunar de la Albuera

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Beneficiaries:

Coordinator  Dirección General de Medio Ambiente. Consejería de Industria, Energía y Medio Ambiente
Type of organisation  Regional authority
The beneficiary is the directorate in charge of nature conservation within the Ministry of Industry, Energy and the Environment of the regional government of Extremadura, western Spain.

None

Administrative data:

- **Project reference**: LIFE03 NAT/E/000052
- **Duration**: 01-JAN-2004 to 01-JAN-2008
- **Total budget**: 553,749.00 €
- **EU contribution**: 415,312.00 €
- **Project location**: Extremadura (España)

Read more:

- **Project web site**: [Project's website (ES)]
- **Publication: After-LIFE Conservation Plan**: Title: After-LIFE Conservation Plan (ES) Year: 2008 No of pages: 2
- **Publication: Layman report**: Title: Layman report (ES/EN/PT) Year: 2008 No of pages: 48
- **Publication: Layman report**: Title: Layman report (ES) Year: 2008 No of pages: 16