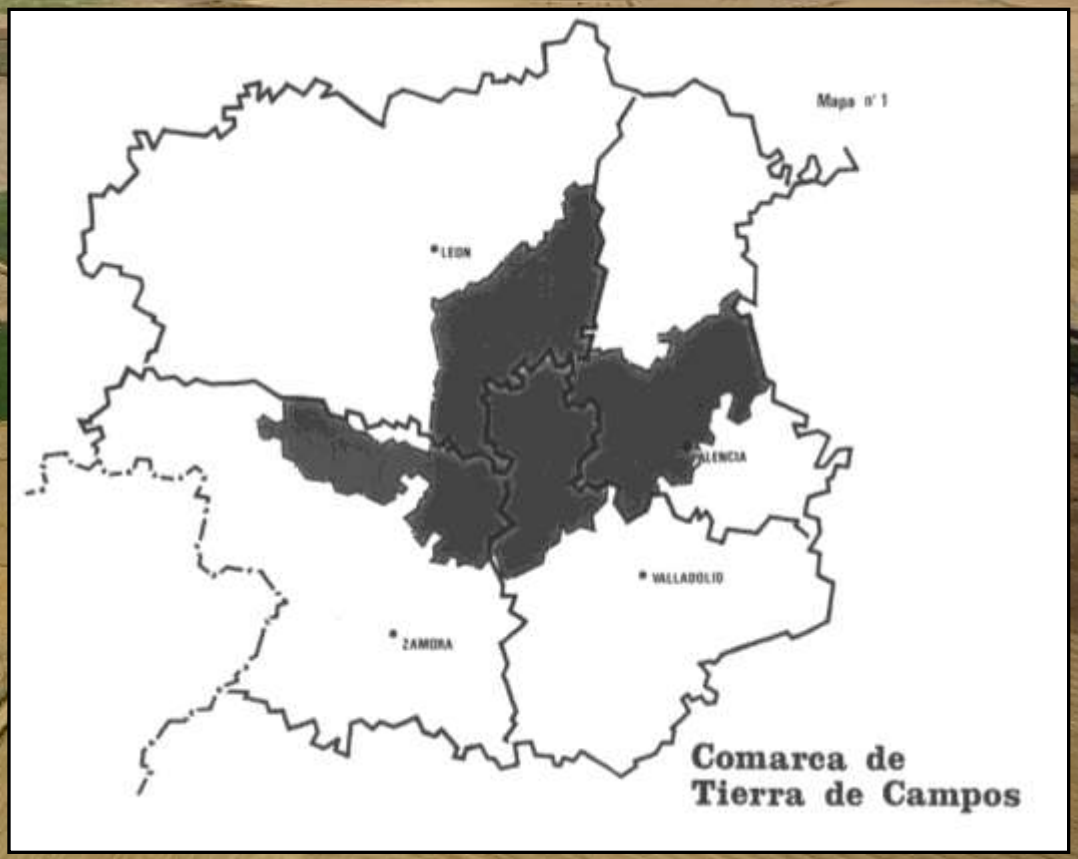
Wetland restoration in Spain: an opportunity for rural and economic development

1. PROJECT AREA: Tierra de Campos (Palencia)

The region known as Tierra de Campos extends along the Castilian provinces of Leon, Palencia, Zamora and Valladolid, with an area of 4,500 km^2 covering 161 municipalities



This vaste steppe region is characterized by a flat topography. It has an altitude of over 700m above sea level, with a continental climate and an annual precipitation hardly over 400mm.

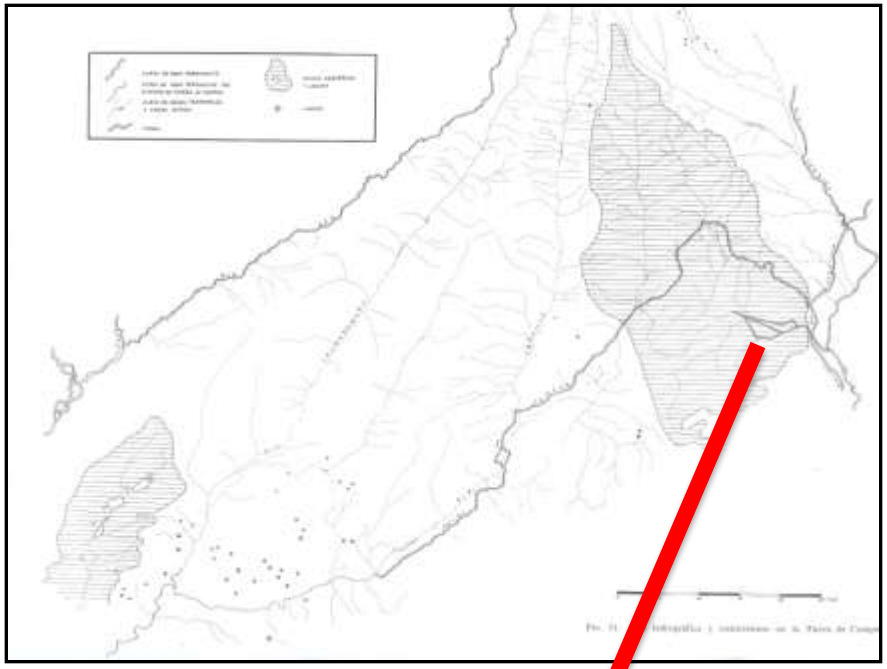
SOCIO-ECONOMIC SITUATION

The region's population is very elderly due to a long process of emigration to the cities.

The main source of income comes from agriculture and farming, activities that have traditionally been linked to the wetlands and their surroundings.

THE FORMER Laguna de La Nava

The highly endorheic condition of the region originates interesting groups of shallow lakes, among which the most significant are La Nava (Palencia) and the salt marshes in Villafáfila (Zamora). La Nava was drained in the 50s and 60s in order to gain land for agriculture.



RESTORATION ACTIONS

The works consisted mainly on eliminating the drainage streams, building a small dam and a by-pass to improve water quality in Boada, and building a small levee on some critical points along the perimeter of Pedraza.

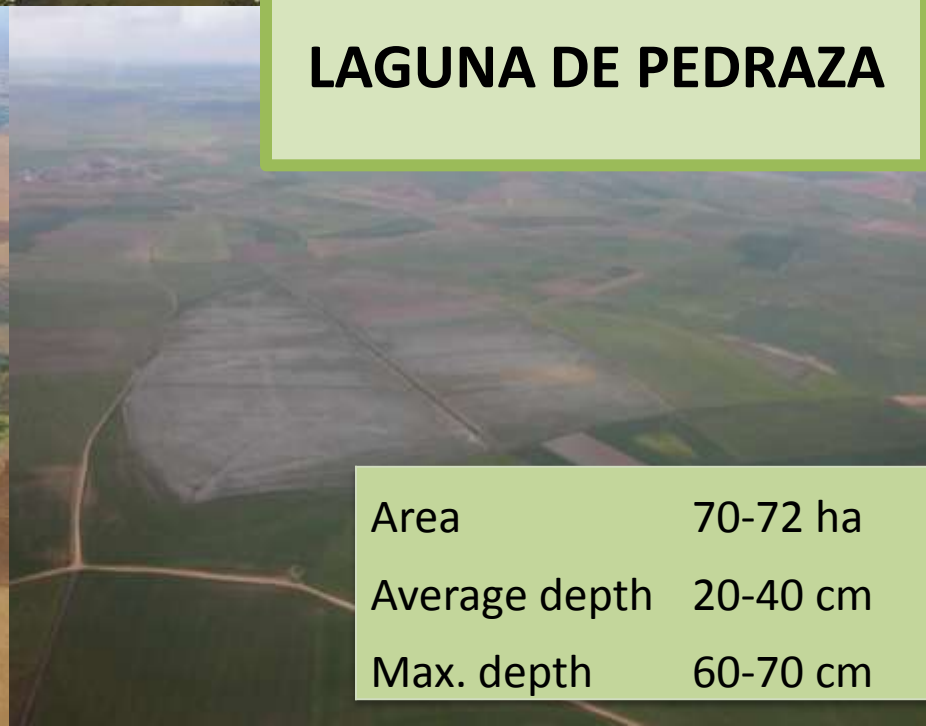
LAGUNA DE LA NAVA

Area	307 ha
Average depth	40-60 cm
Max. Depth	120 cm

LAGUNA DE BOADA

Area	40-65 ha
Average depth	40-50 cm
Max. depth	80-100 cm

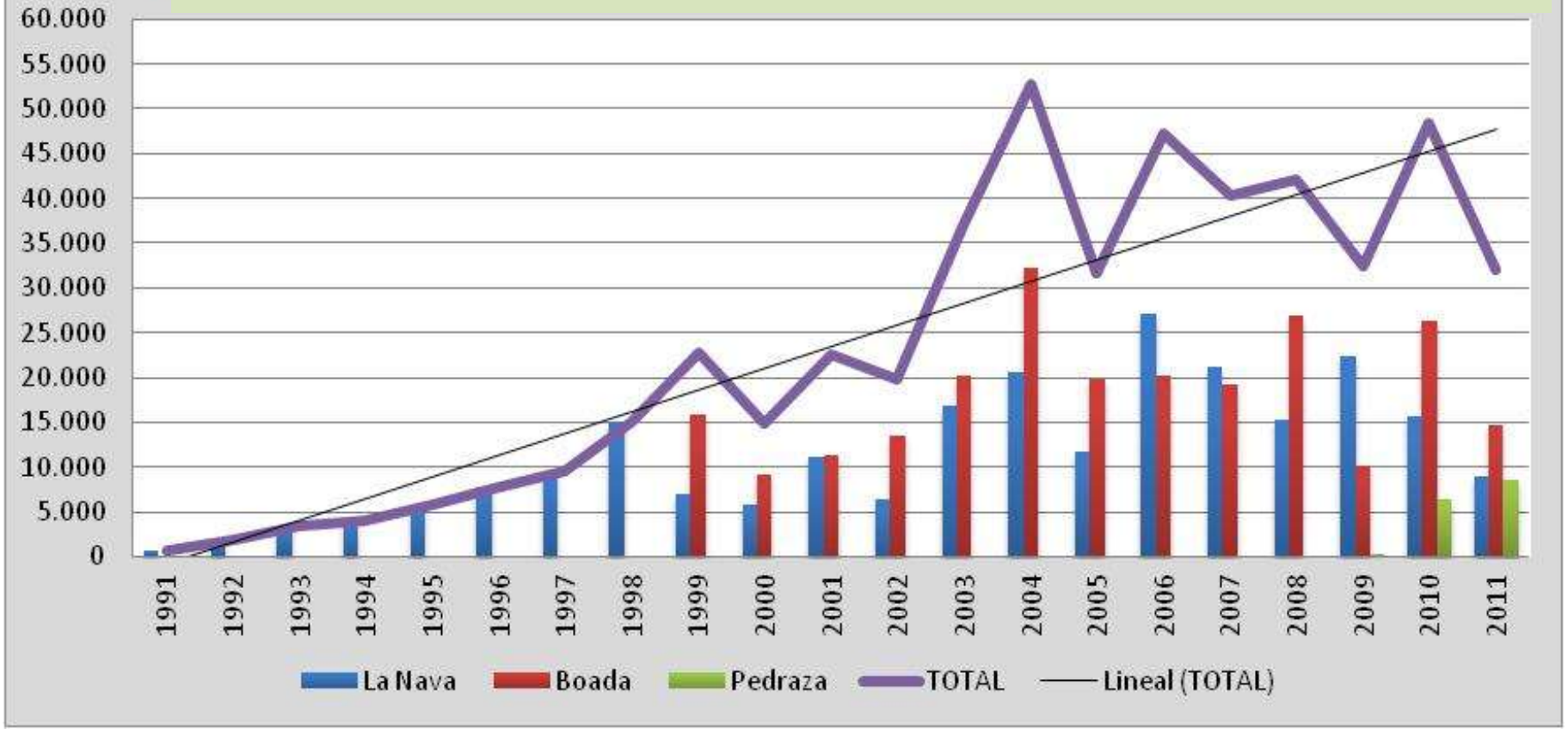
LAGUNA DE PEDRAZA



Area	70-72 ha
Average depth	20-40 cm
Max. depth	60-70 cm

Birds are the main attraction of these steppe wetlands

Census of aquatic birds in La Nava, Boada and Pedraza wetlands



WETLAND MANAGEMENT

The Junta de Castilla y León, a regional authority, manages the Laguna de la Nava, while Boada and Pedraza are managed by Fundación Global Nature. Town councils participate in some aspects of management, but not on a regular basis due mainly to a lack of economic resources.

The wetlands are part of Natura2000 and the Natural Areas Network of Castilla y León

PUBLIC USE AND RURAL DEVELOPMENT PROJECTS

There are two interpretation centres, in the towns of Fuentes de Nava and Boada de Campos

All the wetlands have a network of trails and bird observatories

The restoration projects have also received important private investments for different actions, such as the restoration of some pigeon houses in Pedraza de Campos

Every year tens of volunteers colaborate in workcamps, international exchanges, European Voluntary Service or the bird ringing campaigns in the Biological Station of La Nava.

AGRICULTURE

GOBIERNO DE ESPAÑA
MINISTERIO DE MEDIO AMBIENTE Y MEDIO RURAL Y MARINO

"Recovery of locally grown legumes in the Natura 2000 network to fix rural population"

The goals of the project were mainly:

- ✓ Increasing the farming area of local legume varieties and the value for legume farmers
- ✓ Recovering lost local varieties
- ✓ Creating job opportunities in promoting and selling the products

- ✓ Increasing landscape and habitat diversity as well as trophic resources for local fauna (specially steppe birds)
- ✓ Creating a quality brand for legumes produced in the Natura 2000 area.

2. PROJECT AREA: Talaván Reservoir (Cáceres)

This reservoir, located in the province of Cáceres, East of Spain, was built in 1977 to supply water to the surrounding towns.

The wetland is surrounded by a flat steppe, in an area declared as Special Bird Protection Area.

Inspite of its great natural value, few attention was paid to the area by the locals. In addition, there was a lack of forested surrounding areas that would improve landscape quality and act as a buffer zone to the more sensitive areas in the wetland.

That is why, in 2010, a project for the recovery of the reservoir and its surroundings was developed with the aim of improving its environmental state, showing its value to the population and promoting public use.

RESTORATION ACTIONS

✓ Reforestation:

6,000 native trees and shrubs were planted creating separate patches that will serve as shelter and breeding areas for birds and mammals, as well as improve landscape.

✓ Nesting islands:

Floating islands were installed to avoid predation by mammals and thus facilitate breeding for some bird species

PUBLIC USE AND AWARENESS

✓ Parking area

To protect vulnerable banks and to make access easier for visitors, an area of nearly 2,000m^2 was fit out for parking and delimited by a line of shrubs to minimize noise and visual impact.

✓ Environmental education and public awareness

Seminars, workshops, excursions and activities with local schools took place during the project execution. An informative brochure on Good Practices in Sport Fishing was edited, and two interpretative panels were installed at the previously existent bird observatory.

3. PROJECT AREA: Villacañas wetlands (Toledo)

This complex of salt marshes is located in the province of Toledo, at the center of Spain. The main shallow lakes have an area of 98, 126 and 107 ha respectively.

It has a great faunistic and botanic value since it is a Special Bird Protection Area and it houses important communities of protected halophyte plant species.

Intensive agriculture, poorly treated sewage water, and rubble disposal were some of the most significant threats.

From 1999 to 2002 the LIFE restoration project “Villacañas Wetlands” was implemented here.

PUBLIC USE AND TOURISM

✓ Workshops, excursions and social participation activities, directed to the general public and specially to school students.

✓17 interpretative panels, 3 bird observatories and 8 road signs were installed, and several brochures were edited.

✓ 5,200 m of interpretative trails and access paths have been rehabilitated.

✓Volunteers planted trees, collected garbage, repared nesting islands…

✓Guided tours:

Tourists are guided along the trails and observatories and given a presentation, brochures and prismatics. They can also visit the green filter if they want.

✓ A higher degree of community involvement and a change of attitude towards the conservation of Villacañas wetlands has been observed as a result of the actions taken.

✓The number of visitors, estimated in about 700 per year, has notably increased, specially during spring.

✓ Adapting the surroundings of the main shallow lake, fitting out a parking area and limiting access to the banks by reforesting them has proved essential for the proper development of conservation and public use activities

THANK YOU FOR YOUR ATTENTION