





### Una manera de Bacer Europa



IMPROVEMENT OF THE CONSERVATION STATUS OF HABITATS OF COMMUNITY INTEREST IN THE NATURA 2000 NETWORK MEDITERRANEAN TEMPORARY LAKES. SITES OF COMMUNITY IMPORTANCE (SCI): LAVAJOS DE SINARCAS

Directorate General for the Natural Environment and Environmental Assessmen

# Programa Operativo de la Comunidad Valenciana

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Fondo Europeo de Desarrollo Regional

# IMPROVEMENT OF THE CONSERVATION STATUS OF HABITATS OF COMMUNITY INTEREST IN THE NATURA 2000 NETWORK MEDITERRANEAN TEMPORARY LAKES. SITES OF COMMUNITY IMPORTANCE (SCI): LAVAJOS DE SINARCAS.

**JANUARY 2020** 

#### **Presentation**

The Lavajos de Sinarcas, located in the region of Utiel-Requena (province of Valencia), are a sample of temporary Mediterranean ponds that have been part of the Natura 2000 Network since 2001. They are small water ponds of different sizes that are characterized by experiencing one or more periods of drying out throughout the year and in which highly specialized flora and fauna develop, capable of proliferating in an environment that is subject to constant fluctuations. They constitute unique habitats in which to find breeding and refuge areas for species of enormous importance. The Lavajos de Sinarcas, with a total area of 1.5 hectares, are made up of two different ponds belonging to different watersheds: the Lavajo del Tío Bernardo (Lavajo de Arriba) and the Lavajo del Jaral (Lavajo de Abajo).

During the winter period, in order to eliminate the accumulated ice, it is usual to spread salt on the national road near the habitat. The native fauna and flora are greatly affected by the toxicity produced by the brine, which can cause profound alterations in the composition of species.

The action presented as **Good Practice** has been promoted by the Directorate General for the Natural Environment and Environmental Assessment of the Conselleria of Agriculture, Rural Development, Climate Emergency and Ecological Transition and is part of the Operational Programme of the Comunitat Valenciana 2014-2020. It involves an investment of 64,949.88 euros, of which 50% (32,474.94 euros) is co-financed by the European Regional Development Fund (ERDF).

The action consisted of **restoring** this habitat, recovering the original shape of the washbasins with their peculiar hydrological functioning and delimiting the perimeter of the area to prevent the entry of salt by installing a screen formed by metal profiles and wooden panels.

With regard to the **impact** of these actions, it is worth noting, on the one hand, the recovery of plant species characteristic of the habitat and, on the other hand, the increase in the population of native amphibians. Flora and fauna have tripled their surface area, giving rise to the appearance of **three new species of aquatic plants**. The presence of microcrustaceans typical of this type of habitat that were not present before the action, such as "Triops", has also been detected. In addition, salinity has decreased, reaching levels compatible with the maintenance of the biological communities in the long term.



Below are the arguments that make this action a Good Practice according to the defined criteria:

#### Criterion 1. High level of dissemination among the beneficiaries and the general public.

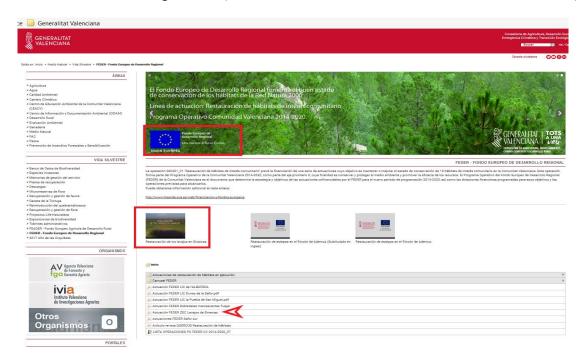
The action has been disseminated in compliance with communication obligations through the following media:

#### Informative posters on the ground





#### Websites of the Conselleria of Agriculture (D. G. Natural Environment and Environmental Assessment)



<u>Informative video about the ecological importance of the Lavajos de Sinarcas and the restoration process, edited in Spanish and Valencian with English subtitles:</u>

http://www.agroambient.gva.es/es/web/biodiversidad/fondo-europeo-de-desarrollo-regional



#### <u>Informative seminars</u>, public events and environmental education:

Citizen participation action "Get to know Los Lavajos" during the Sinarcas cultural week in August 2016





Talk in Sinarcas and later release of fauna in Los Lavajos



<u>Public exhibition in the Botanical Garden</u> <u>of the University of Valencia</u>

#### Diffusion in social networks:

#### **Twitter**



#### Facebook

 $\underline{https://www.facebook.com/revistaquercus/photos/a.158379373180/10156519026378181/?type=3}$ 



#### **Technical publications:**

Quercus Magazine No. 402/August 2019 (p. 26 a 33)





#### Prensa y radio digitales:





#### Informative dossier on the project and the results of the first year of monitoring (24 pages):



Poster commemorating the 25th anniversary of the micro-reserves of flora in the Comunitat Valenciana



#### **Criterion 2. Incorporation of innovative elements.**

In order to reduce the salinity of the temporary pond, a novel solution was designed to affect the two salt entry routes into the pond. On the one hand, to prevent the entry of salt through the circulation of salt water on the surface of the land, it was decided to waterproof the earthen ditch in order to redirect the liquids out of the wetland basin. On the other hand, in order to prevent the entry of salt by splashing, an anti-salt screen made up of metal profiles and wooden panels was used, sealing the contact with the ditch waterproofed with concrete. In this way, the brine and salt intercepted by the screen could be evacuated by the ditch outside the basin of the pond.



As a result, salt input levels to the pond were significantly reduced to levels compatible with the long-term maintenance of their biological communities. As far as it has been possible to investigate, this is the first time that such a solution has been used with positive results to protect a wetland area from the negative impact of salinization due to human activity.

Another action consisted of naturally drying the sediment at the bottom of the tank and then, with the help of a backhoe and a motor grader, filling, shaping and levelling the soil. Finally, the pond was flooded and the rescued fauna reincorporated.







In the images we see the emptying of the bucket and the rescue of the fauna for its conservation and later release. Afterwards it was then filled and flooded.

#### Criterion 3. Adequacy of the results obtained to the established objectives.

The quality of the water reaching the ponds has improved and the flood areas necessary for the maintenance of the flora and fauna associated with this type of natural habitat have been recovered. Also, the development and reproduction of their characteristic species has been favored. The physical demarcation of the plot avoids unwanted intrusions and the transit of vehicles through the area. The risk of salt pollution from the use of salt in road infrastructures to remove ice during the winter has also been reduced.

The posterior monitoring carried out to study the evolution of the flora and fauna has given excellent results, corroborating the fulfilment of the objectives set. After the action, the flood zone is more extensive, increasing the surface occupied by the wetland, as can be seen in the following photographs with the before (A) and after (B) of the action.





Before the performance

After the performance, with the intervention of the ERDF

#### Criterion 4. Contribution to the resolution of a regional problem or weakness.

The action is proposed with the aim of restoring and reducing the weaknesses presented by Los Lavajos de Sinarcas. The over-excavation caused an important modification of the physical environment, that is, the reduction of the flooded area and the modification of the flooding periods. Being permanently flooded, or with a higher than normal flooding regime, some of the aquatic invertebrates typical of these temporary pools disappeared and part of the typical vegetation surrounding them was also lost.

To this problem it should be added that salt deposits were detected in the surrounding area scattered by snow ploughs area the winter months. As these pools are freshwater enclaves, the accumulation of salt could affect and threaten the species that live there.

The work carried out thanks to this action, co-financed by the ERDF, has made it possible to recover the original shape and depth of the ponds, in order to restore the plants and animals that lived there.



Native amphibians such as frogs, toads and Iberian ribbed newts were rescued from the ponds and returned to the Lavajos after the performance



So, a solution has been found to the need for restoration of this habitat, ensuring its long-term conservation and, in the same way, a benefit has been obtained for the visitors who come to the area, who can enjoy a unique and recovered natural environment, previously degraded and in disuse.

#### Criterion 5. High degree of coverage of the target population.

This action translates into a better state of conservation and an improvement in the future prospects of the habitat. Therefore, given that natural heritage and biodiversity play a relevant social role due to their close link to the health and well-being of people, and their contribution to social and economic development, the action contributes to sustainable growth and to increasing the quality of life of neighbouring populations.

The municipality of Sinarcas is part of the region of Utiel-Requena, composed of nine municipalities and a population of 38,000 inhabitants. The scope of coverage of this action has a positive impact on the entire population because of the many indirect benefits it offers, since it can enjoy this invaluable environment given the rarity of the habitat and the species it harbours. It is also a place of recreational and ecological recreation, which can be accessed very easily, since it is very close to a national road. Furthermore, it is an ideal place to promote **environmental education** for people of all ages, where any citizen can come to know this place so rare in our territory.

### Criterion 6. Consideration of the horizontal criteria of equal opportunity and environmental sustainability.

The principle of equal opportunities has been respected at all times. The principle of non-discrimination and equal treatment between all tenderers was respected in the tendering phase of the work. Today, with the work completed and the area fully restored, everyone has the same opportunities to access and enjoy the site.

This action ensures the balance between society and the surrounding nature, achieving positive development results without threatening the sources of natural resources and without compromising those of future generations. The restoration of Los Lavajos de Sinarcas has made it possible to achieve stabilization of the area to enable its development and long-term continuity for the enjoyment of the area in the future, thus ensuring its environmental sustainability.

#### Criterion 7. Synergies with other policies or instruments of public intervention.

The Sinarcas Wetlands are part of the **Natura 2000 Network** because they are on the list of Sites of Community Interest (SCI), and have been approved as a Special Protection Area for birds. This action is consistent with the objectives set out in the Natura 2000 **Network's Priority Action Framework** (PAF) for the management of this Network. Also, the area has been declared a Flora Micro-reserve and catalogued as a Wetland Area of the Valencian Community. Therefore, synergies are established between different conservation strategies, both at European level (Natura 2000 Network and ERDF) and at regional level (Flora Micro-reserve and Humid Zone).

Furthermore, this action is consistent with objective 15 of the United Nations **Agenda 2030** for Sustainable Development in terms of protecting, restoring and promoting the sustainable use of terrestrial ecosystems and halting the loss of biodiversity.

Finally, the **Valencian Strategy for Climate Change** (2013-2020), within the measures for adapting to climate change in the field of forests and biodiversity, considers temporary Mediterranean lakes as very fragile ecosystems that are strongly linked to the level of groundwater close to the surface.







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