



LIFECHARCOS

“Conservation of Temporary Ponds in Southwest Coast of Portugal”

LIFE12NAT/PT/000997

In this edition

- Involvement of the local population in the conservation of temporary ponds;
- More security for South West amphibians;
- Children's story “My Friends Triops”;
- Certified Teacher Training;
- Protocols for the conservation of temporary ponds;
- Sheep help preserve the Temporary Ponds

Supplements

- European Tree Frog
- *Hyacinthoides vicentina*
- Testimony of Luísa Dierixck

Involvement of the local population in the conservation of Temporary Ponds

In order to conserve it is necessary to know and in this sense the LIFE Charcos team has developed several public sessions to inform the local population in the project's intervention area, about the Temporary Ponds, the associated biodiversity, the threats they face and the importance of this habitat for the conservation of nature and for human well-being.

Odemira, Vila Nova de Milfontes, Almogrove and Vila do Bispo were some of the parishes that hosted these public clarification sessions where, after a presentation, the audience was invited to do a field trip in order to know some of the temporary ponds in the vicinity of these localities.

The 200 participants involved in these sessions, from the most varied social areas such as farmers, tour operators, representatives of local associations and other stakeholders in the conservation of the Temporary Ponds, could clarify doubts about the interventions on the field that aimed for the conservation of this habitat, share opinions, discuss some of the threats to conservation and concrete measures planned for the restoration of temporary ponds.

These public clarification sessions are fundamental to achieve the conservation of this priority habitat for the medium and long term because it is imperative to involve the local population in its conservation by sensitizing the community in general and discuss with the farmers the solutions proposed for their preservation, since most of the Temporary Ponds are located in agricultural lands.



More security for the southwest amphibians

With the arrival of winter and the first rains the amphibians begin their activity, leaving the shelters where they took shelter during the dry weather and move to the temporary ponds or other water masses where they will reproduce. It is also at this point that tens or even hundreds of amphibians are often attempted to cross the roads, which are real physical barriers that separate them from their breeding grounds and endanger their survival.

In order to reduce the mortality of this group of vertebrates with significant ecological value, the LIFE Charcos Project team installed a waterway crossing barrier under a road that runs through a complex of Mediterranean Temporary Ponds in the north of Vila Nova de Milfontes, with the purpose of improving the conditions of connectivity between these ponds.





@Bruno H. Martins

European Tree Frog (*Hyla molleri*)

This European tree frog, which until recently was considered a Western European species, is in fact an Iberian endemism, according to recent studies. It is part of the Order *Anura*, reaching a maximum of 5 cm in length and the skin in the back is very bright, without warts and lettuce green color. It has a long continuous lateral band and marked well from the eye to the groin that distinguishes it well from the congenital *Hyla meridionalis* (Mediterranean tree frog).

These tree frog have adhesive discs at the fingertips, allowing them to climb through the vegetation. It has a kind of twilight and nocturnal habits, although it can present daytime activity on rainy or cloudy days. The breeding season begins in the spring, when males begin to migrate into the Temporary Ponds.

In addition to the threat of competitive exclusion by *H. meridionalis*, there is some possibility of genetic contamination by the emergence of non-fertile hybrids. This situation causes that some populations of *H. molleri* are locally in decline in the area of the Southwest of Portugal. Other threat factors that result from agricultural intensification are habitat destruction and contamination of water with pollutants.



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Children's story "My Friends Triops"

The story of two children who knew the Triops Vicente, a small animal of the species *Triops vicentinus* that lives in the Temporary Ponds on the Southwest Coast of Portugal and its adventures to save this threatened habitat is reported in the new children's story of Vanda Brotas Gonçalves titled "My Friends Triops" and edited by the LIFE Charcos Project.

Among other tools, this children's story has been used in action of environmental education in primary schools of the Southwest Coast and has already given rise to a play, where the story was dramatized by the students of the 1st, 2nd and 3rd grade of Vila do Bispo primary school.

The children's story can be downloaded [HERE](#).



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Certified Teacher Training

Ensuring the role of environmental education in the protection and maintenance of the Temporary Ponds of the Southwest Coast of Portugal was one of the main objectives of the three training certified courses for teachers developed by the LIFE Charcos project team and promoted by the LPN Environmental Training Center.

The approximately 80 teachers involved in these training courses had the opportunity to acquire a more detailed knowledge about the Temporary Ponds as well as to know the dynamics of the habitat through its biotic and abiotic processes. It was also provided an approximation to the habitat with direct contact with some examples of biodiversity in the field trips that were made in each training action.



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Hyacinthoides vicentina

(Hoffmanns. & Link) Rothm.

It is a herbaceous, perennial plant (that lives several years) and that has a scaly bulb (like onions), that stays in the soil and stores water and nutrients and that allows it to completely renew its aerial part every year.

It has few leaves, between 3 to 5, which are long and grow directly from the bulb. The flowers are blue-violet in the form of open star and blooms between February and May.

It grows in clayey, sandy or rocky soils with temporary waterlogging, sometimes at the edge of water lines, or in dark environments. It is often found near the Mediterranean Temporary Ponds on the Southwest Coast of Portugal.

Its distribution in Portugal is in the western part, especially in the center-west and southwest, and there is a subspecies of *vicentina* that exists only on the Vicentina Coast.

It is an endemic plant of continental Portugal whose internationally recognized status is **vulnerable** (Walter and Gillet, 1997). At the national level it also receives the status of **vulnerable** (Ramos Lopes & Carvalho, 1990) and **rare** (Dray, 1985). It is legally protected by the Habitats Directive 92/43 / EEC (Annexes II and IV).

Protocols for the conservation of temporary ponds

Several management protocols have already been established with owners, farmers and agricultural managers to implement concrete measures in temporary pond complexes, in order to guarantee the sustainability of investments made in terms of restoration and recovery of this priority habitat.

These protocols, which included sustainable management plans with harmonious practices for the maintenance of this habitat, cover 18 Temporary Ponds within the Community Importance Site of the Southwest Coast, which makes it possible to preserve them in the medium and long term. Examples of land with Temporary Ponds complexes are: Herdade das Casas Novas, Herdade do Freixial, Vila do Bispo Forest and Samouqueira Pine Forest where, in addition to restoration and habitat recovery interventions, demonstration actions were also carried out with management measures.



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Opinion by: Luísa Dierixck

(Teacher in the S. Teotónio pre-school)

"When I heard about it [LIFE Charcos Project] I was very interested and we started working right away ... It made the children realize the existence of the habitat that is in danger and also that they could transmit it at home ..."

"The great strength of the project is to start with the younger children because the younger child is able to get a lot more enthusiastic about this type of activity and transmits their enthusiasm to others and take the project further ... we also shared a lot of information to the community. The children were able to transmit more information in an attempt to save the habitat, explained the dangers [threats]. There was a lot of information sharing for the community ..."

"You should continue to work with the younger students and they continue on the project in the following years, passed on to others because when they get that enthusiasm they are more efficient. And if they really do get that, that's one thing that never goes away. It may dilute a bit in adolescence but then re-emerge".

"And that's what I work for, so they can realize the importance of nature conservation and then get it across".

LIFE Charcos Project

“Conservation of Temporary Ponds in the Southwest Coast of Portugal”

(LIFE12/NAT/PT/000997)

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Sheep help preserve the Temporary Ponds

The traditional pastoralism, made in an extensive regime, was once a common practice throughout the Mediterranean region. However, in the last decades, it has undergone a great decline, with many of the areas traditionally pastured to be abandoned or changed to intensive grazing regimes. This change in behavior has a detrimental effect on the biodiversity of the Mediterranean region, which is often favored by the existence of some disturbance caused by low intensity human activities.

A good example of this is the Temporary Ponds where a beneficial effect of the traditional grazing in the floristic diversity is observed. However, when this is abandoned, some more competitive and more general species become dominant in the ponds, preventing the survival of numerous annual and amphibian plants characteristic of these environments, many of them rare.

In this sense, one of the objectives of the LIFE Charcos Project was to demonstrate the possibility of the sustainable use of temporary ponds, reconciling their use as feeding areas for livestock with the preservation of biological values associated with them. The first results indicate that extensive grazing with sheep is able to maintain the good state of conservation of the Temporary Ponds, preventing their degradation and assuming a fundamental role in preserving the quality of this priority habitat for conservation.



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Temporary Ponds:
a natural habitat to be protected!

<http://lifecharcos.lpn.pt/en/>

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