



Project Life Albufera international newsletter

Welcome to the second edition of our project LIFE ALBUFERA International Newsletter. We are very glad for the last months' advances. We have organised an innovative on-line seminar entitled "Constructed wetlands: working with water for biodiversity", that included the participation of 12 international experts. You can read the summaries of their presentations below and watch the videos on our web site: www.lifealbufera.org

Besides, we have been very active with our travelling exhibition, displayed in 11 different places through the Valencia region. Not to mention the visits from experts and students that we could organise these spring and summer. We wish you a nice reading! You'll hear news from us in autumn!

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Tobias Salathé, Secretary of the Wetland Convention (RAMSAR), welcomed to the on-line seminar highlighting the importance of the constructed wetlands and their planning in an increasingly bigger scale.

The speaker showed his admiration for the work with the constructed wetlands of l'Albufera and esteemed their functions at a landscape level, encouraging the stakeholders to share experiences and results.

"Seeing what you have started to do with constructed wetlands in the large lagoon of l'Albufera allowed us to make sense of it"

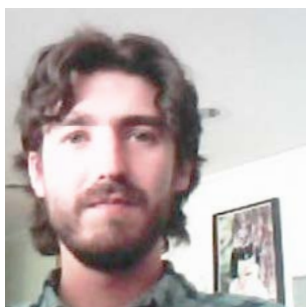
"Big scale constructed wetlands can fulfil many functions beyond water cleaning...providing new places for biodiversity..."

WATER



ROB ROGERS, Broads National Park in England

"Only by working together we could take the necessary steps to improve the environment"



FELIPE VALDERRAMA ESCALLÓN, NGO "Fundación Humedales" (Colombia)

"Basically, they transform organic matter into bacteria and vegetation"



MARÍA CARMEN REGIDOR PERONA, representing the Júcar Basin Confederation

"it also seems more likely that the next revisions of the plan will focus more specifically on the environmental objectives"

Rob Rogers is the Head of Construction, Maintenance & Environment of the Broads National Park in England. He coordinates the construction, maintenance and environmental design works in this park. For our on-line seminar, he has focused on the implementation of the European Water Frame Directive in the Broadland River Catchment. He identified the different structural water challenges that concern the Anglia River Basin District, the operational areas, the physical reasons that hinder the implementation of the European Water Frame Directive in the area, as well as some of the actions that are being performed to improve the catchment.

According to his view of the situation, he underlines the importance of the governmental funding for the land stewardship agreements with the owners in order to reach a sustainable rural development, thus reducing the risk of flooding and improving biodiversity.

Felipe Valderrama, Environmental Water Engineer, works for the NGO "Fundación Humedales" (Colombia) which is dedicated to the conservation, restoration and rehabilitation of wetlands. This foundation is implementing projects of wastewater treatment using simple technology such as the "Green Filters", also used by the partners of the project LIFE+ Albufera.

The researcher exposes the basic concepts defining the sustainable strategies for wastewater treatment for small villages in developing countries. Through the example of the high Andean lake Fúquene, Felipe Valderrama shows the advantages and disadvantages of the Green Filters in his presentation.

María Carmen Regidor Perona, representing the Júcar Basin Confederation, a co-funding partner of the project LIFE+ Albufera, presented in detail the Water Frame Directive, which objective is the achievement of good conditions in every surface water or groundwater. This European Directive includes the basic principles ruling the water policies of the European States and it has been applied to the Spanish Regulations by means of the consolidated version of the Water Law. María Carmen Regidor used two examples of specific measures included in the Hydrological Plan in order to fulfil the environmental objectives in the wetland of l'Albufera of Valencia: establishment of a minimum hydric requirement and definition of an ecological water volume for the Albufera lake.



JUAN JOSÉ SALAS RODRÍGUEZ, responsible for R+D+I in the Foundation "Centro de las Nuevas Tecnologías del Agua" (CENTA, Seville)

"Another kind of use for the constructed wetlands, which is just starting in Spain but is quite developed in other countries, is the treatment of run-off water from the roads".



MAGALI BOYCE Life+ LAG'Nature

"Wetlands are complex and multi-functional lands: flood alleviation, self-purification of water, economic and recreational supports."



DAVID HOWELL SEO/Birdlife

We will be in need for patience and determination on these recovery programs, because in Loch Leven it took about 40 years. Finally, we need to maintain that improved state with clear policies and measures designed to protect the improving water quality and the improving conservation condition."

Juan José Salas Rodríguez, expert in Soft Technology and Water Treatment in small Towns, and currently responsible for R+D+I in the Foundation "Centro de las Nuevas Tecnologías del Agua" (CENTA, Seville), talks about the wastewater treatment using constructed wetlands, which allow the artificial reproduction of the water cleaning processes that happen in the natural wetlands. Juan José Salas talks about the processes of implementation of the constructed wetlands and their possible uses as well as their advantages and disadvantages.

BIODIVERSITY

The project Life+LAG'Nature has been implemented from 2009 to 2013. Coordinated by the Conservatory of Natural Lands in the region of Languedoc-Roussillon (CEN L-R), it was focused on establishing a network of Nature 2000 demonstration sites, as well as on improving the conditions of the lagoonar, peri-lagoonar and dunal habitats.

The areas of intervention have a widely recognised high value, they have great biological richness and they hold traditional economic, touristic and leisure activities. These areas present a visible intersection between essential biodiversity and sociocultural heritage, so then the external pressure is primarily important.

The project Life+LAG'Nature analyses the common problems of these areas: urban pressure... Several specific actions were performed to restore the habitats for the long term.

The project generated a huge interest in the coastal area, thus new partnerships and LIFE projects (Milouv y Envoll) were established. The results overcome the initial goals, and the partners are engaged to maintain these results.

David Howell has been part of SEO/Birdlife for already seven years after a long-time experience in other companies and structures dedicated to water, such as the Scottish Nature Agency or the Centre of Ecology and Hydrology in Edinburgh.

His presentation in the seminar provided an interesting comparison between Loch Leven (one of the Nature 2000 network sites) and l'Albufera. It was focused on the experience of implementation of the Water Policy and the Birds Directive in Loch Leven. He talked about eutrophication in the Special Protection Area and compared the experience in Loch Leven in order to find some keys for the SPA of l'Albufera.



BELÉN LÓPEZ PRECIOSO. Avinença, the Valencian Association for Responsible Land Stewardship and Management.

“The Land Stewardship by non-profit organisations is a tool for preservation.”



JAVIER PÉREZ GORDILLO Coordination Team of the project LIFE + INVASEP

“How much does an ecosystemic service cost? How much does polinization cost? How much does the fertilisation of the soil cost? How much does a species cost? It’s really difficult to estimate these elements but the loss of a species or the loss of an ecosystemic service is an economic cost that we must NOT afford.”



ALEX SALKI Lake Winnipeg Foundation, Canada

“Wetlands are being lost and degraded more quickly than any other ecosystem type.”

“A first phase in restoration projects is to bring scientists, academia, government and other stakeholders together to exchange available data and views on potential solutions”

Belén López Precioso works for Avinença, the Valencian Association for Responsible Land Stewardship and Management, which aims to foster and promote the use of land stewardship within the provinces of Castellón, Valencia and Alicante. During the on-line seminar, she focused on the presentation of the Habitats Directive, considered a keystone for the policies of nature preservation of the European Union. The Habitats Directive develops four lines of work: the Nature 2000 Network, the establishment of a strict regulation of protection of species, the use of some caution when introducing autochthonous species in the natural environment or when releasing allochthonous species and, at last, the checking of these lines of work through surveillance and reporting.

The spokeswoman for Avinença says that, in spite of all the effort that it is currently being done to implement the Habitat Directive, there is still a lot to do in Spain.

Javier Pérez Gordillo represents the Coordination Team of the project LIFE + INVASEP, coordinated by the Directorate General for the Environment of the Government of Extremadura. In his presentation, Javier Pérez Gordillo spoke about the problem of the invasive species, giving facts such as a 76% increase of the alien invasive species in Europe for the last 45 years. This problem, caused by globalisation, has three kinds of impacts: ecological, economical and human-health impact.

The economic impact affects all the socioeconomic sectors without distinction, even sectors that in some cases are responsible for introducing these species.

There is a need for cooperation and teamwork from governments and nations in order to increase the amount of economic studies that could explain this so unnoticed fact.

MANAGEMENT

The Lake Winnipeg Foundation is a Canadian non-governmental non-profit organization with a vision to protect, preserve and restore Lake Winnipeg in Canada. Alex Salki, member of the Science Advisory Council of the foundation, starts his presentation with such alarming data as the disappearance of over half of the original wetlands of the world or a 40% decrease of the wetland surfaces of the world since 1970. After this contextualisation and an explanation of its causes, his presentation is focused on the different participatory models in Canada that exemplify community actions for the recuperation of degraded lakes and wetlands, as well as on the importance of the restoration of these wetlands.



JOHN PINDER Consultor - exENV AGENCY, Reino Unido.

"There has to be a transition from government or administrative leadership and funding down, to one of local stewardship. From one-way linear mechanism to an exchange model."



SARA BORT. TYPESA, Project Officer specialized in water quality

"These constructed wetlands have been designed in order to emulate the existing conditions during last century's seventies in l'Albufera, looking for an environmental integration but also for a cultural and social integration."

Partnerships (agreements on land stewardship) and collaborative approach are concepts that should be present in the title of the projects for recovery of ecosystems, or at least be somehow expressed.

However, according to John Pinder, former consultor of the ENV AGENCY, in fact, the making, maintenance or even understanding of partnerships is still starting and there is a lot to learn about the way they work. It is true that the acknowledgement of their need is increasing and there are progressively more evidences that the collaborative approach can lead not just to success but also to long-term cultural changes that are more and more necessary.

According to his expertise as Lakes Manager at the English Lake District, this work introduces some of the theories from social science on group negotiation and the establishment of common targets for organisations related to the recovery of lakes and wetlands.

The presentation doesn't focus on the technical specifications for recovering wetlands, but explains some key rules for groups and organisations to enjoy their commitment and for different partners to see the benefits of the collaborative work.

Sara Bort, Project Officer specialized in water quality, explained that the constructed wetlands implanted in the rice fields of La Pipa, Milia and L'illa in the National Park of l'Albufera in Valencia are the product of an exhaustive process of technical, social and administrative agreement that wants to be at the height of the great national and international importance of this environment.

The spokeswoman explained that the constructed wetlands in the rice fields of Milia and L'illa have been designed for the post-treatment of the water outputs from the water treatment stations of South Albufera and Sueca. Their aim is to reduce the concentration of nutrients before the water flows to the recipient environment, which has had some serious eutrophication issues for decades. However, it has been designed to act on additional aims such as the improvement of the biological quality of the water and the creation of habitats of a high ecological value, thus improving biodiversity.

TYPESA, a consulting company that has taken an active role in the planning and design of both constructed wetlands, expounded the uses, advantages and disadvantages of this type of wetlands, as well as the previous conditioning factors, the decisions made, the accepted limitations and the evolution of the design, from a conceptual stage (information project) to the construction project.

RESULTS

VEGETATION: Constructed wetlands get painted in green

Over 44000 helophytes have been planted since summer 2014 in some of the sparser areas of the constructed wetlands of Pipa and Milia. In some other areas, the ripe vegetation has been reaped in order to boost a new outbreak (Pipa and Illa). At the same time, the underwater vegetation planted in enclosures in the lakes (sector C) of Pipa, Milia and Illa is being monitored. The full study of these interventions is providing very helpful information to understand how the aims of improvement of habitat, biodiversity and water quality are being achieved.

WATER QUALITY

The constructed wetlands keep improving the quality of the water from the lake l'Albufera (Tancat de la Pipa and Tancat de Milia) and from l'Estany de la Plana (Tancat de l'Illa). Among the most noticeable results there is an efficiency in removing total nitrogen over 60% in the three Tancats and an efficiency in removing total phosphorous over 50% in Pipa and Milia. In the picture, you can see an improvement on the water transparency produced after its pass through the Tancat de Milia (efficiency in removing suspended solids over 70%). Picture: Water Albufera – exit Tancat de Milia". In this Tancat, chlorophyll levels under 30 mg Cl a/m³ are being achieved, which is a target established by the draft Júcar Basin Plan (2015-2021) for l'Albufera. These results allow us to keep advancing in the development of recommendations for the management plans for wet zones of the Nature 2000 Network.

You can consult on line the data on the water quality in the inputs and outputs of the constructed wetlands.

(<http://www.lifealbufera.org/index.php/en/data/water-quality>).

BIRDS

During the breeding season 2015, it has been documented the reproduction of 15 species of waterfowl, together with 12 species of marsh passerines. The biggest achieved success has been the documented reproduction for the first time in SPA Albufera de Valencia of the Garganey, a species categorised in Spain as vulnerable according to the Red Book of Birds, this being another example of the ecological potential of these sites. Among the rest of species, they stand out because of their unpromising state of conservation in the SPA Albufera de Valencia the moustached warbler, the Savi's warbler, the Eurasian coot, the red-crested pochard, the common stilt or the purple swamphen. However, many other species have used the constructed wetlands during these months for feeding while they nested in the surroundings.

Even though the reproductive success hasn't been assessed, apparently it has been a good year for the red-crested pochard, the moustached warbler and especially for the Savi's warbler, which presented the highest amount of couples registered in the constructed wetlands until now.



LIFE ALBUFERA took part in the **IV edition of the Fira d'Entitats de l'Albufera** with the presentation of results, a round table on constructed wetlands, the delivery of the awards of the photography contest organised for the World Wetlands Day and a boat visit to the Tancat de la Pipa. (V. fig 1)

Some partners of the project took part in the **"World Congress of the International Association for Hydro-Environment Engineering and Research"** (The Hague, Netherlands). (V. fig 2)

The **travelling exhibition of LIFE ALBUFERA** has performed 11 stays in towns near the Natural Park of l'Albufera (Cullera, Silla, Sollana, Valencia –Universitat Politècnica de València-, Alfafar, Catarroja, Massanassa, Port Catarroja –Fair Albufera-, Elche –virtual exhibition Universidad Miguel Hernández-, El Palmar). (V. fig 3)

During June, a group of **five students from the University of Wageningen** (Holland) has been studying the influence of the Tancat de Milia in l'Albufera lake. You can download the report they did just clicking on the following link <http://www.lifealbufera.org/index.php/es/networking>. (V. fig 4)

Over 2000 visitors went through the constructed wetlands of LIFE ALBUFERA, involved in several ways: 39 field visits (726 people), 29 school visits (1185 students) y 9 volunteers (141 participants). Here you have some pictures of some of these activities:

A **group of technicians from the Palestinian Ministry of Agriculture**, in a travel organised by CERAI (Centre of Rural Studies and International Agriculture) and the German Agency for International Cooperation-GIZ(V. fig 5)

A **group of tour-operators of nature tourism**, organised by the Tourism Department, and the Valencian Association of Birding Guides (Ornithological Turism) (V. fig 6, author Yanina Maggioto)

International Volunteers removed the floating garbage in l'Albufera, coinciding with the Nature 2000 Network Day. (V. fig 7)

LIFE+Albufera **strengthen the population of European pond turtles** of the Tancat de Pipa with the cooperation of the Department of Infrastructures, Land and Environment in an act together with the Director General of Environment, Salomé Pradas. (V. fig 8)

Presentation of the project **LIFE ALBUFERA on Infoday** about the Program LIFE the 14th of July in the Park Technologic of Paterna.

A **participative meeting with technicians** from administrations with powers on the Natural Park was organized the 15th of July.

During the **"9th Symposium for European Freshwater Science"**, in Genève (Switzerland) between 5 and 10 de July, the results of the project.

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NEXT EVENTS

Next stay of the **travelling exhibition and talk on the LIFE ALBUFERA** Project in the Parador of El Saler <https://www.facebook.com/lifealbufera>. (check the days on our web www.lifealbufera and on our Facebook)

International Contest WETPOL 2015 that will be hold in York (UK) (13-18 septiembre 2015).

National Wetland Contest organised by the Regional Government of Andalusia, the City Councils of Jerez and El Cuervo, and LIFE Tollos, to be hold in Jerez de la Frontera (Spain) (12th-14th November 2015).

OTHER LIFE NEWS

DG Regio from the European Commission has launched the **VI edition of the photography contest "Europe in my region"**. Until the 28th of August, you can send photos of European projects –all the Life projects are eligible. The best 100 photos will be publicly voted between the 31st of August and the 8th of September. The prize includes also 1000 Euros to spend in digital photography materials.

<https://apps-europa.eu/DG-REGIO/photo-competition/pages/like.php>

The Franco-German TV company ARTE is looking for short films, made by European citizens about natural environments. These 2 - 3 minutes videos will be used in the project of a collaborative documentary, thus being aimed to protect Nature. See more information below: <http://info.arte.tv/fr/node/65196>





Project LIFE ALBUFERA

Integrated management of three constructed wetlands following the Water Framework Directive and the Directives concerning Birds and Habitats

With the support of:



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