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DEPUTACIÓN DE LUCC



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1. High-precision technology to improve conservation of Cantabrian yew woodlands

June 22nd, 2018

Thanks to this study, the dimensions, structure, and state of conservation of the European yew can be calculated in the yew woods of Tosande, in the Natural Park of Fuentes Carrionas and Fuente Cobre-Montaña Palentina. It will also enable to study the yew tree of San Cristobal de Valdueza, located in the region of El Bierzo.

Under the framework of LIFE BACCATA (LIFE15 NAT/ES/000790), "Conservation and restoration of Taxus baccata woods (9580*) in the Cantabrian Mountains", an action plan has been carried out. It aims to improve the characterization and monitoring of the conservation plans of the yew woods of Tosande, integrated in the Natural Park of Fuentes Carrionas and Fuente Cobre-Montaña Palentina, and the yew of San Cristóbal de Valdueza, located in the municipality of Ponferrada.

The yew woods of Tosande are located on a slope facing north at an altitude of 1,400 to 1,650 meters, forming a mixed forest mostly of beeches (Fagus sylvatica) and yews (Taxus baccata), along with other leafy members. The yew of San Cristóbal de Valdueza is a female specimen (Taxus baccata) and is considered one of the most emblematic trees of Castilla y León due to its monumental, cultural and social significance. The tree is located next to a small hermitage at a height of 1,115 meters, surrounded by crops and pastures about 210 meters from the town of San Cristóbal de Valdueza.

The action plan consisted in conducing a high-precision, terrestrial photogrammetric survey in 3D of a specific surface of the yew woods of Tosande. Photogrammetry is a technique based on studying and accurately defining the shape, dimension and position in space of an object or objects using measurements made over the photographs of those objects.

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In order to perform this project in the **Tosande woods**, aerial and terrestrial platforms (the DJI Phantom 3 Professional drone and the Gimbal DJI Osmo camera, respectively) have been combined so as to acquire photographs that will later be processed using Automated Digital Photogrammetry, Remote Sensing and Geographic Information Systems (GIS) techniques.

With the information obtained in the previous phase and the data collected in the area, different parameters will be calculated in relation to the dimensions, structure and conservation status of the trees within the studied location.

During the photogrammetric survey and subsequent processing, the companies Bioma Forestal and 4Datum Investigación y Desarrollo S.L. have participated under the leadership of Cesefor and have been coordinated by the Junta de Castilla y León, partners of the project.



Life Baccata

The LIFE BACCATA project works for the conservation and restoration of the priority habitat of the yew –currently threatened and in regression– in 15 areas of the **Natura 2000 Network** of the Cantabrian Mountains ranges and belonging to Galicia, Castilla y León, and the Basque Country.

The project plans to act on a large area of the Cantabrian Mountains, although the study and the results obtained will have an international reach. This is due to the fact that there are similarly threatened territories in Portugal, France, Italy and Greece that have this type of habitat.

The yew has suffered a series of threats that directly influence the biodiversity of the areas it inhabits. These threats have originated over the years and are of various kinds: fires, fellings, construction of infrastructures, fragmentation, and lack of connection between these natural spaces, as well as the repercussions of climate change. Individually or jointly, these threats have endangered the survival of this species, its habitat, and the biodiversity it contains; therefore, it is necessary to take action and guarantee a sustainable future.

LIFE BACCATA will apply the necessary measures of protection and forest management that will promote the improvement of the conservation and restoration state of the yew tree and woodlands. By doing so, it will reinforce their natural regeneration, including species of flora and fauna that inhabit them, and will contribute to halt the biodiversity loss.

The LIFE BACCATA project is co-financed by the European Commission within the framework of the LIFE Proposal, taking place between 2016 and 2020 in 15 areas of the Natura 2000 Network of the Cantabrian Mountains range and belonging to Galicia, Castilla y León, and the Basque Country. The Santiago de Compostela University is participating as project coordinator, having as partners the Junta de Castilla y León, Cesefor, Hazi Foundation and TRAGSA Group.

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2. The LIFE BACCATA Project is ending the characterization phase and the habitat diagnosis 9580*

April 11th, 2018

The Action Al named "Characterization and habitat diagnosis 9580*" of the LIFE BACCATA Project is about to end, aiming to clarify the interpretation of the habitat 9580* in Spain, to obtain information in order to promote locally this habitat and to define a methodology for the development of the following actions.

This action focuses on the habitat 9580*, that currently has an "unfavourable-inadequate" conservation status in the Atlantic region and an "unfavourable-bad" conservation status in the Mediterranean, according to the report about the implementation of the Habitats Directive in the period 2007-2012 (article 17 of the Directive), both in Spain and in the EU. It must be reminded that the yew is affected by a series a threats that directly have an impact on the biodiversity of the occupied areas. These threats appeared over the years and take various forms: fires, pruning, infrastructures' construction, fragmentation and lack of connection between these natural areas or the impacts of climate change. Individually or together, these threats have endangered the survival of the species, its habitat and the biodiversity, it is therefore necessary to act and ensure its future in a sustainable way. The action's works focus on pine forests in fifteen areas of the Natura 2000 Network in the Cantabrian Mountains belonging to Galicia, Castile-and-León and the Basque Country.



Two phases have been established in this Action Al. On the one hand, an inventory of pine forests was elaborated in its scope of action, studying the degree of connectivity and other aspects such as the floristic composition and the presence of threatened and exotic species. The habitat mapping through field work, the study of the relationship between the population and the pine forests and how these have impacted on traditional uses, have culminated in this first phase. On the other hand, necessary indicators have been identified to evaluate the project's impacts on the habitat in accordance with what is established in the Habitats Directive. Now starts the following action focusing on the technical planning of the conservation.

The LIFE BACCATA Project intends to implement the necessary **measures of protection and forest management** that promote the improvement of the conservation status and the restauration of the yew and pine forests, by encouraging its natural regeneration, and the one of flora and fauna species in these areas, and by contributing to a slow-down of the biodiversity loss.

The LIFE BACCATA Project is co-funded by the European Commission within the framework of the LIFE call for proposals and is taking place between 2016 and 2020 in fifteen areas of the Natura 2000 Network in the Cantabrian Mountains and belonging to Galicia, Castile-and-León and the Basque Country. The University of Santiago de Compostela participates as project coordinator and also participate as partners Castile-and-León Council, Cesefor, Hazi Foundation and TRAGSA Group.



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3. European Natura 2000 Day, within the framework of the LIFE BACCATA project, celebrated with a visit to the SAC of Parga–Ladra–Támoga

MAy 14th, 2018

On the occasion of the "European Natura 2000 Day" on May 22nd, a conference was held in the Agricultural Biodiversity and Rural Development Institute (IBADER) of Campus Terra, encompassed within the activities of the LIFE BACCATA and LIFE FLUVIAL projects, and organized by IBADER.

Throughout the morning, a visit was held in Lagoa do Rei, which belongs to the Rábade townhall, in the SAC of Parga-Ladra-Támoga (ES1120003). The activity was attended by municipal representatives, environmental associations, researchers from the Lugo Campus, members of the Spanish National Research Council (CSIC) and associated beneficiaries of other LIFE Nature projects.

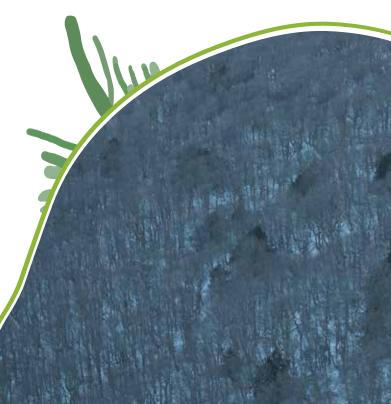
During the afternoon an event took place in the classroom "Luciano Sánchez García", at the IBADER of Campus Terra (in Lugo). It held a series of interventions that allowed the participants to acknowledge the efforts made so that the Natura 2000 Network may be considered one of the most outstanding accomplishments of the European Union.

The presentations round was opened by Victoriano Urgorri Carrasco, of the "Graña" Biological Station (USC). The lecture made an interesting synthesis regarding the natural and heritage values that marine biodiversity possesses in Galicia, providing an important reflection on the role that the Natura 2000 Network carries out in its conservation.

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Serafín González Prieto spoke afterwards and explained the interesting action plans that the Galician Society of Natural History is implementing with regards to the conservation and restoration of habitats and species in the Natura 2000 Network, emphasizing the priority types.

Following after, Miguel Fernández Pardo, –from the "Mariñas-Betanzos" Rural Development Association– proceeded to talk about the establishment of quality marks in areas of the Natura 2000 Network, aided with the work carried out by the "Mariñas Coruñesas e Terras do Mandeo" Biosphere Reserve. This lecture clarified the advantages of a quality brand based on natural areas, such as the **Natura 2000 Network** and the **Biosphere Reserves**.



Finally, Antonio Rigueiro Rodríguez, director of the Courel Scientific Station (USC), presented the book "As orchids from Serra do Courel." The autor, Elvira Sahuquillo Balbuena, attended the event and expressed her gratitude to all those who had contributed and helped in the publication of her work.

This act has increased public awareness of the Natura 2000 Network and its importance with regards to conservation of cultural heritage and the services provided by ecosystems. Moreover, it has also showed its contribution to the economy and well-being of the communities that reside within the areas of influence.

Program:

17:00 Presentation.

17:15 Marine biodiversity in the Natura 2000 Network of Galicia. Victoriano Urgorri Carrasco ("Mariña da Graña" Biology Station, Santiago de Compostela University, USC).

18:00 In situ conservation experiences of species within the Natura 2000 Network. **Serafín González Prieto** (Galician Society of Natural History, SGHN).

18:45 Implementation of quality brands in the areas of the Natura 2000 Network. **Miguel Fernández Pardo** ("Mariñas-Betanzos" Rural Development Association).

19:30 Book presentation: "As orquideas da Serra do Courel." **Antonio Rigueiro Rodríguez** (Santiago de Compostela University, USC).

Further information available in IBADER.



4. Presentation of LIFE BACCATA in Ribadeo (Lugo)

June 13th, 2018

The LIFE BACCATA project was presented in Ribadeo (Lugo) on the occasion of the conferences held on March 23, 2018 at the Hernán Naval Municipal Auditorium regarding **Atlantic-Pyrenean Biosphere Reserves**.

These sessions have been organized by the Spanish MaB Committee of **UNESCO**. Members of the Scientific and Management Committees of the Spanish MaB programme participated and, on this account, addressed a series of projects, actions and experiences posed within the present Reserves.

As a sample of the projects developed within the territorial scope of these Reserves, the Agricultural Biodiversity and Rural Development Institute (IBADER) from the Campus Terra of the Santiago de Compostela University attended this meeting to present the LIFE BACCATA project. The objectives and planned action measures were explained in the presentation, as well as the expected results. In addition, the preliminary results of the genetic sampling developed by the project were presented, commenting as well the most outstanding actions of the project for the current year, 2018.



5. Annual follow–up visit to LIFE BACCATA May 31th, 2019

The external **LIFE monitoring team (NEEMO EEIG)** –represented by Ainhoa Darquistade Fadrique– performed the annual visit to the LIFE BACCATA project, held in Ojo Guareña, Burgos.

Being held on June 11, 2018, this is the second annual follow-up visit from the NEEMO EEIG external team to the LIFE BACCATA project. All the beneficiaries of the project attended the event (IBADER,TRAGSA, HAZI, CESEFOR, Junta de Castilla y León) and presented to the monitoring team the progress of the project in their respective areas of action.

The technical, economic and administrative monitoring meeting was held throughout the morning at the Park House **'Ojo Guareña'**, located in Quintanilla del Rebollar (in Merindad de Sotoscueva, Burgos), within the Special Protection Area for Birds (SPAB) of Ojo Guareña (ES4120005).

During the afternoon session, the attendees visited Arceo (in Valle de Mena, Burgos), in the Special Area of Conservation (SAC) of Valle de Mena (ES4120049), where LIFE BACCATA has carried out a closure project to avoid the effects of herbivory on the regenerated Taxus baccata. They have also eliminated the competition and favored the conservation of habitat type 9580^{*}, through the staff from the Junta de Castilla y León.

The session allowed them to evaluate the degree of compliance of the project, to solve queries and to provide indications and guidelines to all the partners that could enable a better implementation of the discussed actions.



6. Presentation of LIFE BACCATA in a Summer Course of the Santiago de Compostela University

September 25th, 2018

The LIFE BACCATA project has been presented in Piornedo (in Cervantes, Lugo) on July 13, 2018, on the celebration of the Summer Course **"Biodiversity and heritage in the mountains of Lugo: conservation and social use**", organized by the Santiago de Compostela University (USC).

María Dolores Vázquez Castro and Elena Freire Paz directed the summer course, with the presence of Oscar Rivas López in the secretary's office. The objective of the course was to obtain specialized training –both theoretical and practical in nature– aimed at understanding the biodiversity and cultural heritage specific to Ancares. The course focused on working under the maxims of interest convergence, process mediation and conflict resolution in order to favor the conservation and promotion of all environmental and social factors.

Being a total of 15 enrolled students, they were able to participate in the subsequent discussion raising by questions or providing their point of view about the conservation of the vew tree and woodlands. This has also allowed an important exchange of ideas on the most relevant aspects regarding the management of these ecosystems.



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