LIFE baccata, Preserving and restoring the yew forests of the Cantabrian Mountain chain| LIFE15 NAT/ES/000790 | 2016-2020

Newsletter N. 6

January 2021

Sumary

SOCIOS

LIFE15 NAT/ES/000790

ADMINISTRACIONES COLABORADORAS

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Photo 1: Hemispheric photo to measure fractional forest canopy (the proportion of ground covered by the vertical projection of the canopy)

Monitoring the Implemented Actions in the Framework of the LIFE BACCATA Project

20th December 2020

Castilla and Leon partners, Cesefor and the Regional Government of Castilla y León, have started monitoring the conservation and improvement actions in several of those stands that have been characterised within the Life Baccata Project.

This monitoring work is described in Action D1. This action, which is designed to assess the impact of the Project conservation actions on habitat 9580*, must be implemented by all partners to assess the effectiveness of the restoration actions, taking decisions, when appropriate, and including changes and/or the implementation of new measures.

Aims:

- **Supervising the progress of the restoration process**
- **Controlling the occurring changes**
- **Correcting the occurrence of unwanted effects**
- **Promoting processes that are considered to be beneficial for the recovery of the site naturalness and biodiversity**

The Action includes the implementation of the experiences provided by habitat 9580*–based LIFE Projects in the Iberian Peninsula (LIFE 12 NAT/PT/950 y LIFE 11 NAT/ES/711). By doing so, the outcomes from the different projects are expected to be comparable and its conclusions to be replicated in other areas across the European Union.

To this end, a joint monitoring work coordinated by IBADER is taking place and in which every partner is in charge of their enclaves. The inputs from the first and intermediate seminars (Action E1) were taken into account, as well as the collaboration with other previous European projects

LIFE baccata es un proyecto cofinanciado por la Comisión Europea en el marco de la convocatoria LIFE y se desarrolla entre 2016 y 2020

The monitoring works that are carried out and will continue to be in place periodically in the future are well differentiated in two levels:

- In detail, through round plots where dasometric and floristic inventories are produced.
- At a second level, where changes in the canopy of habitats will be represented by taking as a reference a number of transects in which monitoring-indicator-related data are collected.

The monitoring indicators identified in Action A1 by the Bioma Forestal expert team are used. In addition to these, other indicators specific to each enclave may be used, which enable the assessment by stamp or stamp cluster and action type. In all instances, their corresponding verification sources and monitoring protocols are also used.

The monitoring indicators for Castilla and Leon are the following:

Factor 1. Seed Production: Fruit should be produced in a sufficient amount to allow seed dispersal which leads to the growth of regeneration.
Factor 2. The existing regeneration several types: The presence of several phases or stages of regeneration is studied in order to examine the pulses of regenerated Taxus baccata at a different time scale in its recruitment.
Factor 3. Estimated post-dispersal herbivory-predation burden (Regeneration damage): The activity of herbivorous animals (burden or pressure) on Taxus baccata, Ilex aquifolium and other relevant functional seedlings is estimated.

Photos 2 and 3: regeneration status after the installation of the exclusion fence to avoid herbivores.

Factor 4. Forest Dendrodiversity: The wealth of indigenous tree species typical of the habitat other than Taxus baccata is estimated.

Factor 5. Structural Diversity: The structural diversity of the yew tree population is estimated.

Additionally, these indicators may be subject to a monitoring process on a short-term scale established by the Habitat Directive, that is, every 6 years. These indicators, which are obtained from the most streamlined process, are mostly focused on the regeneration occurrences and the regeneration conservation status throughout its growth during the first stages (Factors 1 to 3).

Conteo de frutos en pies femeninos.

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The Regional Government of Castilla y León Completes the Restoration Work in Yew Woods at the Palencia and Leon Mountains and at Picos de Europa

20th December 2020

With this fall's plantings, the Regional Government of Castilla y Leon has just completed three different projects spanning 2019–2020 for the improvement and restoration of the yew wood habitats at the Palencia and Leon Mountains, as well as at the Picos de Europa Regional Park for the amount of €77,065.66.

The characterisation study of the habitat (9580*) of community interest (HCI) 'Mediterranean Taxus baccata Forests', at the Cantabrian Mountain Range in Castilla y Leon made clear that taking actions in these areas is very important. According to this study, despite the wide experience gained in the Palencia Mountain at managing the habitat for conservation purpose, yew woods are subject to the strong competition of beech trees and to the large hoofed animals' pressure, which result in a notorious shortage of regeneration. Going into the Central Mountain of Leon, one come across the shady Mediodía Mountain Range and the Bodón Beech Forest, as well as the surrounding massifs, which all together hold a great potential for the recovery of this habitat, although beech trees and herbivory represent a sturdy competition.

Photo 1. Tejeda de Tosande, where a large part of the work in Palencia has been carried out.

Photo 2. Opening made around yew trees through selective clearings on beech.

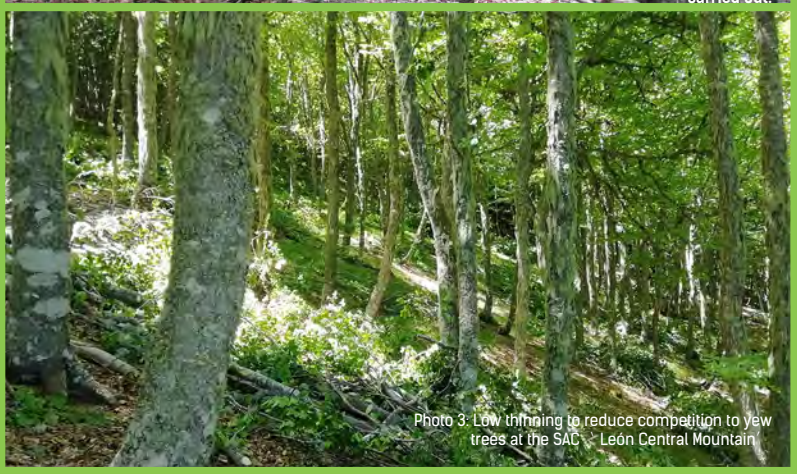

Photo 3: Low thinning to reduce competition to yew trees at the SAC – León Central Mountain

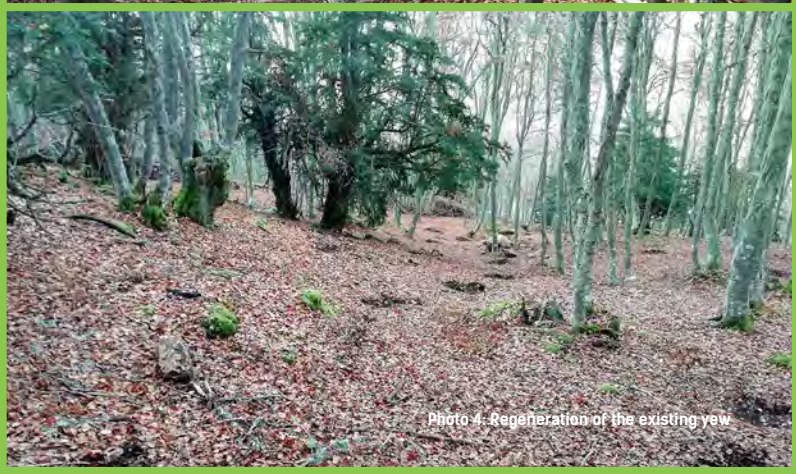

Photo 4: Regeneration of the existing yew

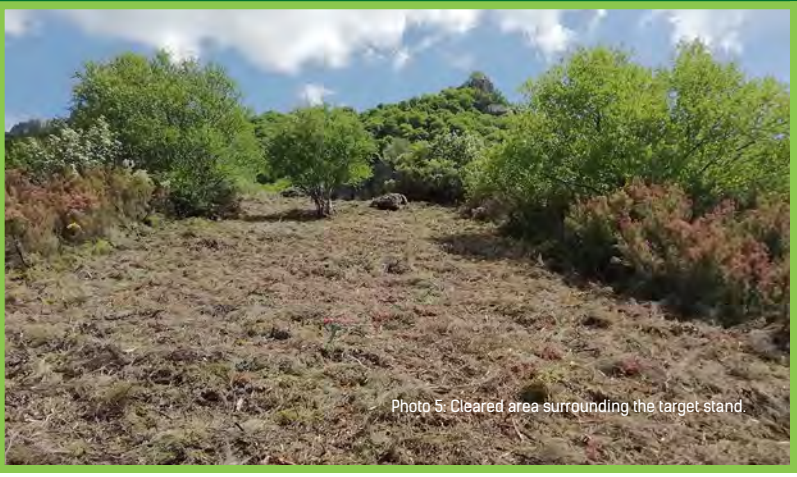

Photo 5: Cleared area surrounding the target stand.

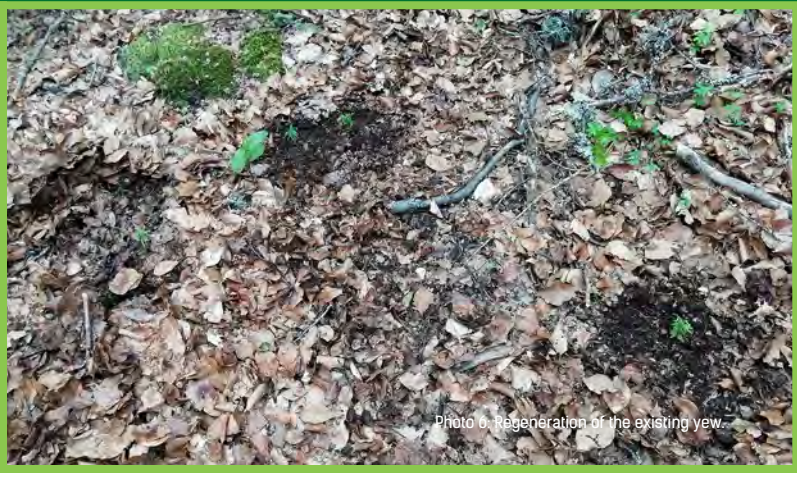

Photo 6: Regeneration of the existing yew.

Up to the Northeast of this province, in the natural environment of the Regional Park of Picos de Europa in Castilla y León, the environmental agents´ deep knowledge on these yew woods was documented. Thanks to this, previous actions were efficiently carried out, from which clear results are already obtained, e.g. exclusion fencing. The same steps should be taken in the Lillo Pine Forest and other stands, such as The Corva Baja.

To this end, these three actions were implemented which, in the Palencia case, were focused on the SAC and SACB (Special Area of Conservation for Birds) ES4140011 ' Fuentes Carrionas and Fuente Cobre – Palencia Mountain' . Actions consisted of a selective felling of 1 hectare of beech trees that competed with yew trees; the installation of 820-m hunting fence 1.5 meters high made of a simple-twist mesh; and repairing up to 2 km of a difference fence. Furthermore, up to 24.8 hectares were cleared manually in order to ease planting at some sites and as a way to reduce the risk of fire at others. Subsequently 900 seedlings of different yew neighbouring species were planted to a 2.0-hectare area. Along with these, 20 planting protecting systems from previous years were removed from the forests. Furthermore, up to 24.8 hectares were cleared manually in order to ease planting at some sites and as a way to reduce the risk of fire at others. Subsequently 900 seedlings of different yew neighbouring species were planted to a 2.0-hectare area. Along with these, 20 In the SAC ES4130050 ' León Central Mountain' , space competition from beech trees was controlled thanks to low and light thinning in this species across 16.9 hectares plus the selective thinning made in 250 feet, applying girdling as the first choice.

A 360-meter exclusion fence was installed to favour yew regeneration. Two types of plantings were used: connectivity planting between the main copses in 6.7 hectares and the enrichment planting in 0.1 hectare of the exclusion stands. To do so, yew, Scots pine, chequers, rowans, and hazelnut trees were used. As a protective measure against fires, manual and mechanical clearings were applied around the target stand as well as the nearby tracks across 0.2 hectares.

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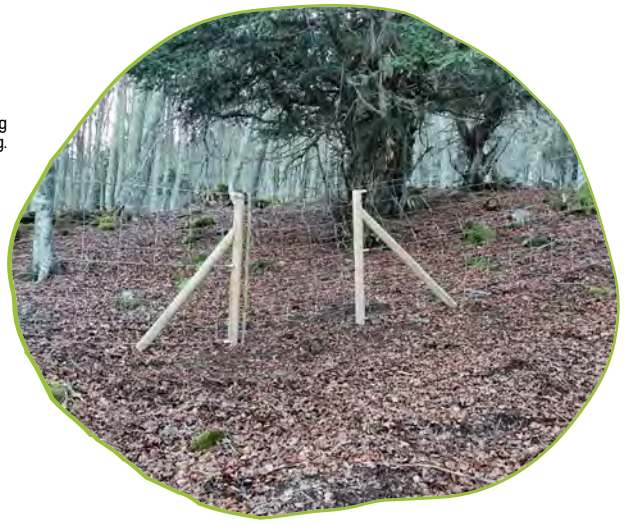


Photo 7: Repairing work to the hunting fence for the exclusion fencing.

Finally, in the SAC and SACB ES4130003 ' Picos de Europa in Castilla y León', located in the Regional Park with the same name, the low and light thinning work done to the existing beech trees spread across 25.0 hectares contributed to the access of light and new species. Moreover, beech direct competition to yew feet was reduced through selection thinning in 176 beech feet. In addition, the existing hunting fence was repaired by installing new poles and mesh along 150 meters in order to guarantee that the exclusion fence promoted yew regeneration. Finally, the risk of fire was reduced thanks to the scrub clearance of 0.7 hectares between a track and the targeted stand.

Photo 8: Selective clearing among beech trees surrounding an exceptional yew.

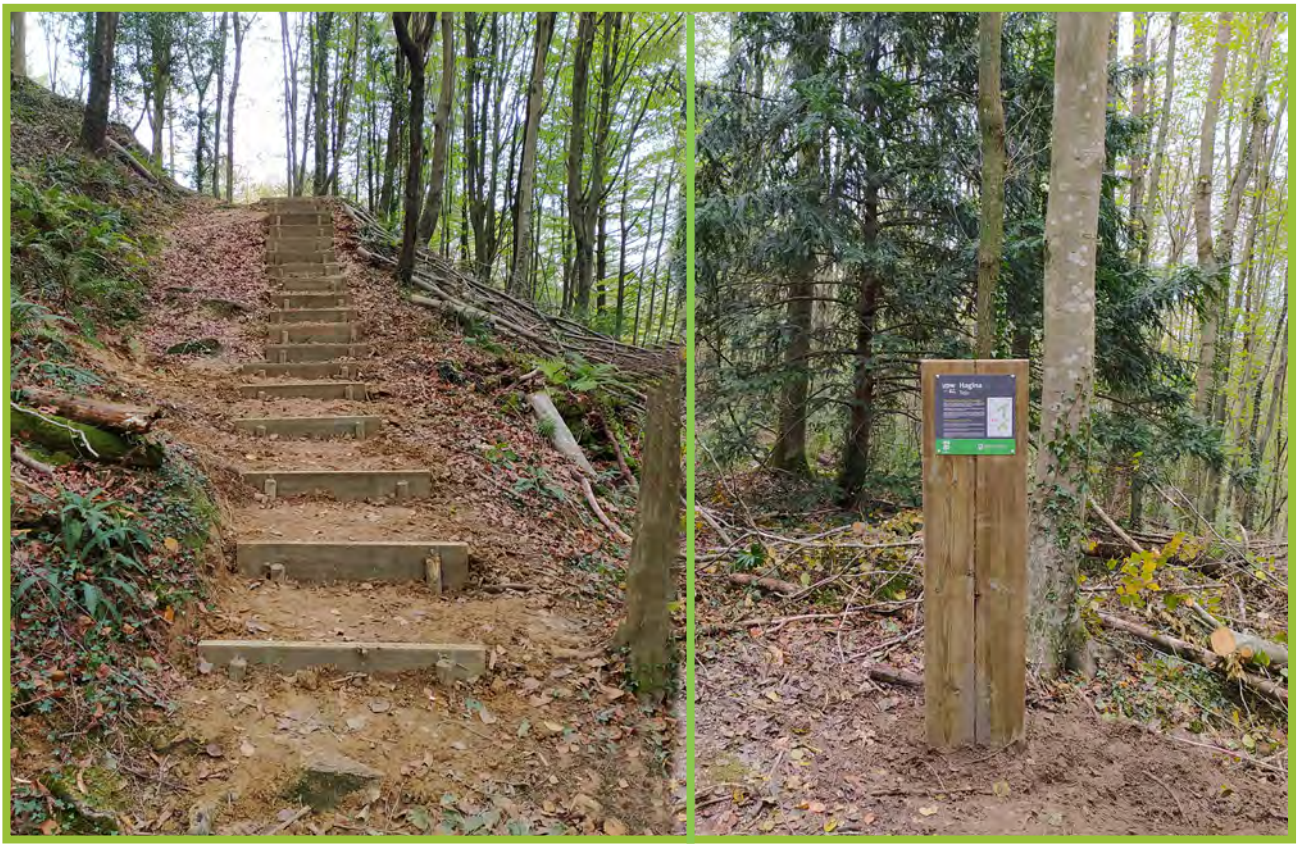
Pagoeta Natural Park (Gipuzkoa) now has an informative trail about the yew and the yew groves

15th January 2021

Work has been completed on the adaptation and signposting of this approved trail, which includes an information panel, several milestones with information on each informative stop and a leaflet to encourage self-guided visits. Work has also been intensified to promote the yew tree in the vicinity, mainly lighting, so that the path can be used as a showcase for the project's actions.

In addition, it has been visited with the staff of the Parketxe (interpretation centre) and they have been given a script of contents so that they can transmit the results of the project in their dissemination activities.

Guided tours organised by the project will take place when Covid restrictions allow it.



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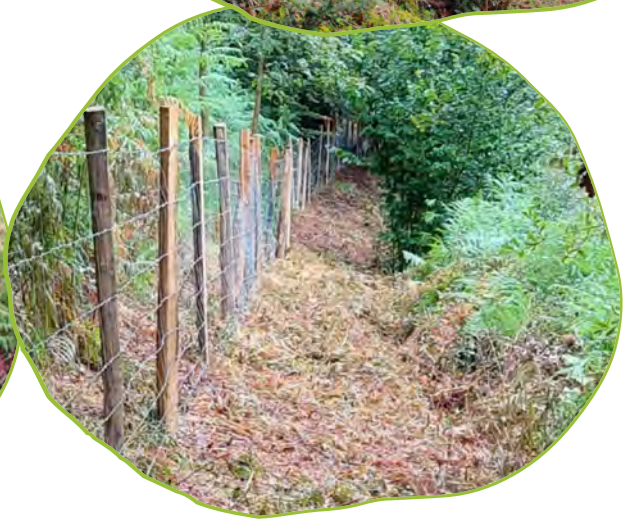
Experimental Fences in the Surroundings of Lareo and Ausa Gaztetu at the Aralar Nature Park Are Now Installed

15th January 2021

By preventing herbivores from entering, we aim to promote the germination of yew seeds produced by nearby specimens which may grow to a prominent size.

The site was chosen according to the guidelines set by the completed characterization study (which finds herbivores to be a relevant factor in both settings) and considering the environment features, the presence of yew individuals, the regenerated companion species, and the lack of interference with socio-economic uses. The site boundaries were agreed upon during the joint visits with representatives of the Mancomunidad of Aralar and the Municipality which owns one of the lands (Abaltzisketa). During those visits, interest for the Project was shown and the presence of the travelling exhibition and the delivery of informative conferences –whenever COVID-19 restrictions allow to– were requested.



Works Favouring the Presence of Yew in Pagoeta Were Completed in the Framework of the Life Baccata Project

20th January 2021

To further this effort, the Diputación Foral of Gipuzkoa has been working in the Nature Park and the Natura 2000 Special Area of Conservation (SAC) to date. Their work involved the opening of the canopy where seed-producing yew specimens where found, the thinning of tree areas with fine yew regeneration to promote its development, small yew plantings and companion species and reconfiguring damaged fences to make them suitable for yew stand protection.

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Conservation Actions at the Aralar (Gipuzcoa) Nature Park are Finished

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Final touches (replacing oddly some plants that did not survive and reconfiguring the fence) were put in place successfully despite weather conditions.

Apart from opening the canopy where some seed-producing yew specimens were located and clearing woods where they can grow, small yew cultivars and companion species were established. These cultivar clusters or ' applied nucleation' are found at strategic locations to improve the ecology connection among yew stands according to the guidelines set by the completed genetic study.

The Aralar Natural Park, Gipuzkoa hosts the travelling exhibition on the yew and the Life Baccata project

It was moved in September from Pagoeta Natural Park, where it had been since March 2020, coinciding with the most restrictive phases of Covid. It can be visited there until February 2021, when it will be transferred to interested municipalities in the surroundings of the Aralar and Pagoeta National Parks.

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