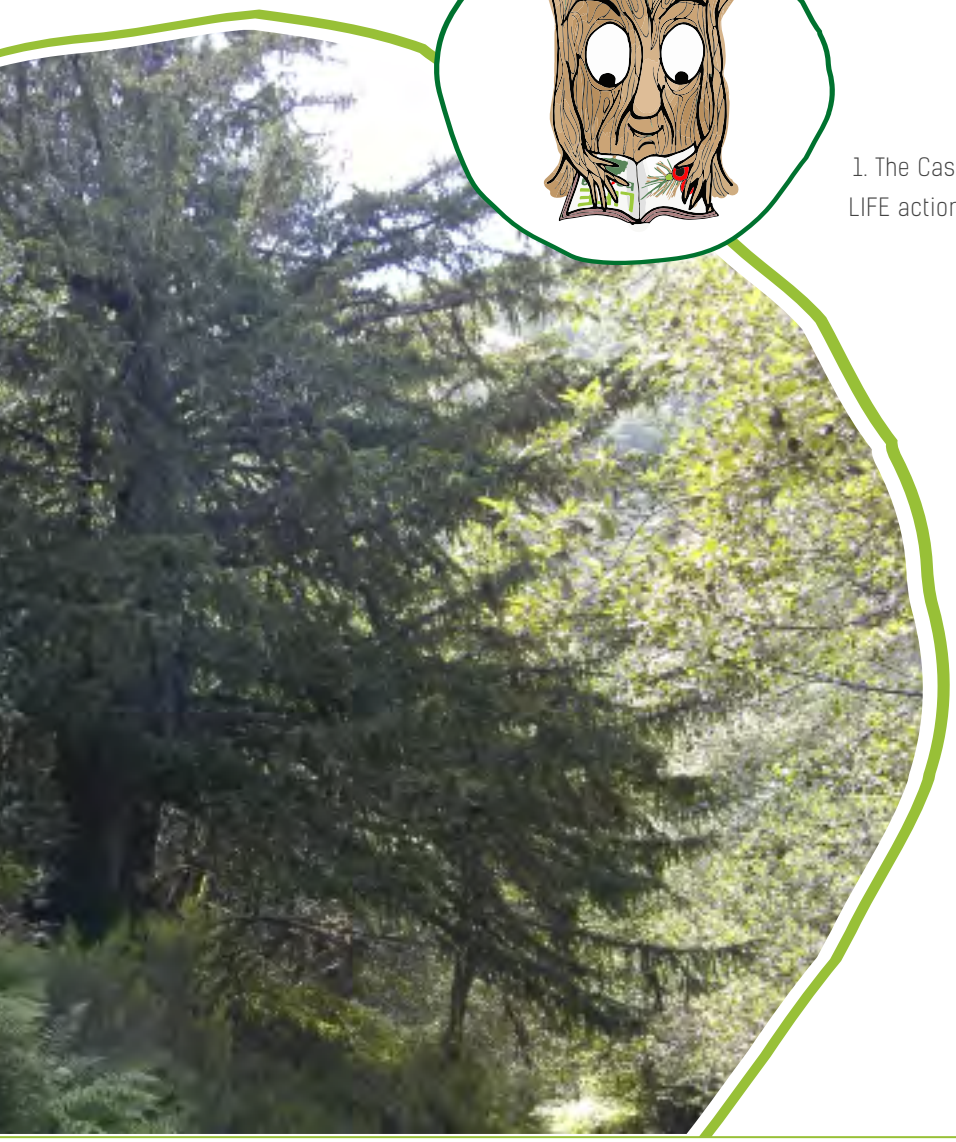
# Newsletter N. 4

July 2019



## Summary

# 1. The Castilla y León Regional Government awarded the LIFE actions to upgrade and expand the yew tree habitat located at Leon Central Mountains.

July 18th, 2019

The Castilla y Leon Regional Government has just awarded a public contract to Eural to carry out the upgrading and protection Actions in the Framework of the **LIFE 15 NAT/ES/790 for the preservation and restoration of the Mediterranean Forests of Taxus baccata (9580*)** located at the Cantabrian Mountains of the Leon Province Central Mountains ' for the amount of €29,144.06. 8-month completion time (from 2019-2020) is established.

These works will upgrade and expand the yew tree-related habitat found in this Special Preservation Area (SPA) of the Leon Mountain Range by attaining the following aims:

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| Regulate the occasional space competition by beech trees *(Fagus sylvatica)* on the existing yew tree feet by removing these species codominant and/or dominant feet that prevent light from reaching the canopy lower stratum. |
| Make a gradual canopy opening to enable the installation of non-target species for plant formation diversity. |
| Increase the space for the yew tree habitat (9580*) of community interest (HCI) by planting the seedlings of these habitat typical catalogued species. |
| Restrict the herbivores' access to enhance the yew tree natural regeneration. |
| Strengthen the existing yew tree populations by planting new feet. |
| Protect the HCI from threats such as forest fires by adjusting fuel loads in the stand perimeter. |

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Elimination of codominant

The characterization study of the "Mediterranean Forests of *Taxus baccata* (9580*) in the Cantabrian Mountains of Castilla y León ' CIH helped to realize how important it is to take action in this area. According to this study, the SPA in the Central Mountain Range of Leon, at the shady Mediodía Mountain Range and Bodón Beech Forests, as well as the surrounding massifs, hold a great potential for the recovery of this habitat, despite the sturdy competition made by beech trees and the herbivory.

The so-called Bodón stand stands out at the heart of this SPA. It is included in the Public Use Woodland # 641 known as "La Cota y Bodón' and it belongs to the minor local entity of Pontedo, at the Cármenes municipality. The stand is used as a bridge to connect eastern and western towns scattered over this province's mountain chain. For this reason, it was decided to implement a great deal of these preservation actions in this site.

Aimed at attaining the above objectives, the following actions will be implemented:

## Silvicultural Systems:

Initial overall thinning will be only applied to beech trees in 16.86 ha of the stand so that more light reaches the lower strata of the tree canopy. The removal of non-thriving shoots, dead trees and/or those with spotted signs of diseases as well as dominant feet will be carried out until the target thickness is achieved. In order to foster ecological niches, any larger dead feet or feet with cavities found in the way will be preserved hence they are shelters and source of biodiversity.

Then, for the yew tree feet a canopy opening will be more specifically applied. This will involve removing those larger beech feet that are competing in excess. As a result, a sufficiently thick matrix with enough canopy cover and internal gaps that are big enough to uphold feasibility of the lower strata will be achieved throughout the stand.

Finally, the residues resulting from this process will be cut up and spread across the soil to protect the regeneration.

## Reforestations:

Two types of reforestations are being considered: Connectivity reforestation in the stand surrounding area and enrichment reforestation in the inner area.

The connectivity reforestation will take place on 6.71 ha with a thickness of 1,100 feet/ha (3x3 m planting distance). This will allow yew trees and other catalogued species to grow in the opposite direction to the stand which will enable their connection with other neighboring stands. A specific combination of yew trees *(Taxus baccata)*, Cantabria Scots pines *(Pinus sylvestris)*, downy birch trees *(Betula pubescens)*, rowan trees *(Sorbus aucuparia)*, blackthorns *(Prunus spinosa)* and hazelnut trees *(Corylus avellana)* will be planted.

The enrichment reforestation will take place on 0.09 ha although with a thickness that goes up to 1,600 feet/ha. This will feature homogeneous tree masses and very low floristic diversity. In this case, the combination of species will consist of yew trees, downy birch trees and rowan trees.

Seedlings come from the central nursery in Valladolid with a certificate of origin. Regarding the yew trees, some healing in was experienced in Leon based on forest regeneration and additionally direct translocations will apply. This last technique was already tested in the Pagoeta setting, in the framework of the LIFE Project and now it will be used in this Leon area.

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Punctual mixed light

## Fencing:

Considering yew tree regeneration is at risk due to the herbivory, a reduced area will be fenced with a hunting mesh to protect seedlings from household animals and wildlife.

## Defense against threats:

A 20-m security strip will be established in some strips surrounding the tree-lined stand. De-brushing will take place to remove pyrophyte species *(Erica, Cytisus, Genista, Rubus, Rosa y Chamaespartium)* although the existing tree species will be kept.

Additionally, the edges of those tracks that cross the stand and its surroundings will be also de-brushed with manual and mechanical means although no tractors or any other type of machinery that may widen the original pattern or disturb the hardcore structural condition will be used.

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Yew without releasing light

# 2. Forestry actions to upgrade the Habitat 9580* in Galicia are completed

July 18th, 2019

The LIFE BACCATA Project is co-financed by the European Commission in the Framework of the LIFE Call. It will take place between 2016 and 2020 in fifteen Natura 2000 Network sites in the Cantabria Mountain Range located in Galicia, Castilla y León and the Basque Country. The aim of the LIFE BACCATA project is to improve the conservation status of yew woods (9580*). IBADER, from the University of Santiago de Compostela, is the lead partner of this project and the Castilla y León Regional Government, CESEFOR, Fundación HAZI and Grupo TRAGSA are the remaining partners.

Action C2 is one of the different actions carried out in the framework of this Project. It involves carrying out some silviculture activities to avoid those pressures and threats affecting the conservation status of the habitat 9580*. This will be achieved through increasing its area of occupancy and improving its structure and functionality. To take this action within Galicia's borders, a total of 15 ha of the Os Ancares-O Courel (ES1120001) SPA was occupied. An old single-species plantation of Pinus sylvestris was removed. Works were led by TRAGSA in collaboration with IBADER, which provided the scientific-technical advice to be sure the conservation status of the key elements of biodiversity was not affected. The surface where the action was implemented is ready for Action C3, which involves planting the characteristic species of the habitat 9580*, according to the **Galicia Habitat Manual**, aimed restoring the site.



The land where the action is implemented is owned by the municipal, communal woodlands (Known by the Spanish acronym MVMC which stands for Monte Vecinal en Mano Común) which belong to the neighbour's community of Riocereixa (Pedrafita do Cebreiro, Lugo). This community materialized their willingness to support this project by signing a collaboration agreement with the University of Santiago de Compostela, which is in charge of carrying out the actions in their farms. The rapport established with MVMC and their engagement were a great added value to the project. Furthermore, they acted as key stakeholders since they rated LIFE BACCATA outcomes as positive for their farms and saw how the status of their properties improved.

Since this action took place in a Natura 2000 Network site ( Os Ancares - O Courel SPA, ES1120001), apart from the approval by the forest management competent body, it was also necessary to obtain the approval of the competent body in the context of nature conservation and protected areas management. Thanks to these procedures, no conflicts arose between the two management domains. On the contrary, silviculture tasks were approved by the former, meanwhile the latter also approved these measures because it was assumed the project tasks were designed to optimize the conservation status of the habitat 9580* –thereby helping to meet the objectives set out in their own sectorial policy.

Likewise the competent body in cultural heritage and the river basin body were consulted but neither one required any approval application because none of their respective assets to protect were affected.

The MVMC is managed by the competent body in forests management through a consortium, which regulates forestry uses of these forestlands. Dealing with the consortium has been quite challenging when implementing the silviculture measures delivered in the project. The reason for this was the additional meetings held and the specific documents that were required to process technical reports and legal approval applications in the framework of the consortium. But far from being a stumbling block to implementation, this turned to be an added value to the project since IBADER and TRAGSA are highly experienced in issuing this type of documents. As a result, a great synergy was generated because the old contractual models (e.g. the consortium which dates back to 1955) and the implementation of current projects on natural resources conservation (e.g. the LIFE BACCATA Project) were made compatible

The silviculture work to remove an old single-species plantation of Pinus sylvestris of 15 ha in the MVMC of Riocereixa (Pedrafita do Cebreiro, Lugo) went on from September 2018 to May 2019 —when the whole process was completed. The high vulnerability of the Natura 2000 area (ZEC Os Ancares – O Courel ES1120001) where work was done, its rugged orography and the existing harsh weather conditions (snowfalls with >3 week frequency, from October 2018 to April 2019) caused the delay. Therefore, once all the relevant approvals were obtained and before actions started, several visits were made, along with the crew in charge of pine grove felling, to give details about methods, action strategies, ways to avoid impacts and to draw the right plan for the development of works.

Once all matters were clarified, manual felling operations started. To do so, operators used chainsaws and the necessary personal protective equipment (PPE) for their safety. For felling operations, the friendliest felling trails for the naturally-regenerated species (Sorbus aucuparia, Betula pubescens, etc.) that are characteristic of the habitat 9580* were chosen. These species work as the basis on which the characteristic lush canopy will be re-established and they will be complementary to the restoration taking place later on.

Following the felling operations, a number of hauling roads were built in number and layout without causing any impact on the natural components (soil, non-living natural resources, upwelling, species, etc.). By establishing these roads, logging operations could be done onsite, which means that logs were removed safely and without harming the natural regeneration. Once logging and skidding operations were completed, hauling roads are closed and restored.

Cutting-up operations are done with a processor that uses the hauling roads to travel across the forest following contourlines (horizontally). Felled stems at both roadsides are turned into 2.15m-long logs by the processor. Then cut-up logs are placed in small stacks by the hauling road. The felled trees not reached by the processor's arm are cabled and dragged close to the hauling road with the assistance of a small tractor and 2 operators. This way all the felled wood is cut by the processor.

Felling and skidding operations are carried out in the plot with self-loading equipment that travels along the hauling roads loading logs stacked by the edges. Once the trailer is fully loaded, the self-loading equipment carries the load to the log landing zone and the same operation is repeated as many times as necessary to extract all wood.

Due to the orographic features of the forest, the stack at the log landing zone does not exceed 10m3 in volume. Therefore, before this volume is reached, logs are uploaded on to the truck and brought to a space that is big enough for stacking all the extracted wood. This operation will be repeated until all felled timber is transported. Taking into account the project needs in terms of space size, a flat area located 8 km away from the plot was the chosen site. All the logs extracted there were stacked for auction in the framework of the consortium that involves the competent body in forestland management and the MVMC of Riocereixa. The total volume of timber exceeded 1,000 T.
Having completed Action C2, forestland is prepared for Action C3. This begins with the manual grinding of debris and by dibbling soil in a quincunx pattern so then the characteristic species of the habitat 9580* —which are produced through Action C1— are planted.

This is an exemplary Project in the face of the alignment of silviculture management and maintenance in a favourable conservation state of all types of habitats in the Natura 2000 Network; the synergies created between old contractual models and the implementation of current conservation projects (life); and the active engagement of local communities (the MVMC of Riocereixa in this particular case) and key stakeholders during the pre-planning meetings and during the silviculture operations themselves.

# 3. Outcomes of the Mediterranean forests of Taxus baccata' characterization in the Cantabrian Mountain Range in Galicia

July 8th, 2019

The LIFE BACCATA Project is co-financed by the European Commission in the Framework of the **LIFE Call.** It will take place between 2016 and 2020 in fifteen Natura 2000 Network sites in the Cantabria Mountain Range located in Galicia, Castilla y León and the Basque Country. **IBADER** from the University of Santiago de Compostela is the lead partner of this project and the **Castilla y León Regional Government, CESEFOR, Fundación HAZI** and **Grupo TRAGSA** are the remaining partners.

The characterization of the "Mediterranean forests of Taxus baccata' in the Cantabrian Mountain Range of Galicia was done according to the objectives set in the LIFE BACCATA Project. The study involves the characterization and diagnosis of the habitat aimed developing the technical planning for the specific conservation actions; assessing the habitat 9580* ex-ante situation; assessing the ethno-cultural elements of the yew woods; and establishing a methodology to assess the project effects.

This type of studies allows for the review of the habitat 9580* interpretation criteria and for the habitat 9580* updated mapping, which enable the correction of the existing mistakes in the **Project Standard Data Forms (SDF)** of the Natura 2000 Sites. More accurate mapping favours a more suitable analysis of its conservation status.

**The objectives of this study were the following:**

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| Help to make a clearer interpretation of the habitat 9580*. |
| Gather information for the local appraisal of the habitat 9580*. |
| Lessen the uncertainty level when developing the technical planning of the conservation actions. |
| Define the methodology used to follow up the Project effects on the habitat. . |

The study began with a literature review to clarify the distribution of the habitat type in the territory. This review has revealed that the interpretations made at national level have important deficits, while the Galicia Habitat Manual adopts the definitions of Interpretation **Manual of EU Habitat,** citing the presence of this type of habitat in Galician territories, both in the Mediterranean and the Atlantic. According to the recommendation contained in the final paragraph of the definition of habitat 9580 * in the Interpretation Manual of EU habitats, and for the sake of biogeographic consistency with what is exposed in relation to the Portuguese yew, which are also considered to belong to this type of habitat, yew woods found in the rest of the Atlantic region of the Iberian Peninsula, and therefore Galician, should be included in this category. One of the main guidelines in the Interpretation Manual of EU Habitats indicates the fact that many of the types of habitats of Annex I are qualified by biogeographical terms, which means they have their main occurrence in a particular biogeographic region. It does not exclude the possibility of finding the same habitat type in other biogeographic regions since these often isolated presences have great scientific and conservation value, particularly in those areas where the habitat types are very fragmented and influenced by human activities.

With respect to the information contained in the SDF Galicia, the approval of the Master Plan of the Galicia Natura 2000 Network through **Decree 37/2014** has led to the provision of more accurate mapping and updating of such SDF. This way, from 2016 they incorporate consistent information with the **Galicia Habitats Manual.**

With regard to habitat characterization 9580 * in Galicia, note that formations are occupying small surfaces, which are embedded in tree stands of greater extension. From the altitudinal point of view, these forests dominated by Taxus baccata are distributed over a wide range (630-1450 m), although most of them are mainly upper supratemperate distributed, i.e. they are above 1,200 m. Often they are located on slopes of steep incline and N component orientation. As far as lithology concerns, units of siliceous metamorphic rocks predominate, but are also represented carbonate rocks (limestones and dolomites). The soils are, almost without exception, characterised for its high stoniness and abundance of rocky outcrops, and can be included in the types of leptosols and Umbrisols of FAO soil classification.

They have been counted more than **90 species of vascular plants in Galicia yew woods**, varying the number of species per inventory between 10 and 41 taxa. The diversity of the flora present in undergrowth is inversely proportional to coverage evergreen species reached in the canopy (yew, holly, laurel), or to the degree of structural complexity. The predominant biological types are hemicryptophytes (38.2%), phanerophytes (23.5%) and geophytes (27.9%), and clearly minority camephytes (5.9%) and therophytes (4.4%). It should be highlighted that the invasive species in Galicia yew woods are virtually absent, comprising only the presence of some Prunus laurocerasus allochthonous species as in formations located near population centres.

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## The added value :

Apart from its intrinsic value as Western extreme representations in the European context of the type of priority habitat '9580* Mediterranean Forests of Taxus baccata', included in Annex I of the CD 92/43/CEE ('Habitat Directive'), Galicia yew woods have added value that comes from their accumulated biodiversity. Vascular plant populations *(Narcissus pseudonarcissus nobilis, Ruscus aculeatus)* protected by the European Community and regional provisions are among its botanical wealth. Regarding its fauna, the presence of these yew woods is associated with the conservation of some tree stands of great value in terms of feeding multiple protected and/or threatened-extinction vertebrate species that live in the Western end of Cantabria Mountains. At any rate and according to the definition of a favourable conservation status provided in Article 1 of the **CD 92/43/EEC**, some status indicators may be established for the Galicia yew woods. Dominance and co-dominance of yew trees in the tree canopy is an indicator of the structure and composition of the tree-lined formation and by extension, of the habitat 9580*. On the other hand, the presence of undergrowth species with low tolerability to browsing and trampling as well as the existence of the regenerated *Taxus baccata* itself reveal the type of habitat good conservation status. In this regard, the presence of frugrivore birds and micro-mammals in this type of habitat favours yew tree seed dispersal and germination. This helps to keep natural regeneration of *Taxus baccata* in yew woods.

Despite the vast majority of yew woods in Galicia is relatively far away from human settlements and located in difficult to access sites, these formations have been also subjected to human's activity since time immemorial and until recently. This can be confirmed by looking at the many stumps and evidences of logging residues and pollarded trees found in these forests.

How local inhabitants used these areas occupied by yew trees and/or harvested the forests' characteristic species (mainly comprised of yew trees, Taxus baccata) reveal the ancient nature of these formations and how they witnessed man's adaptation to the territory hardship. Nevertheless the traditional uses that have been going on in these areas where the habitat 9580* of Mediterranean Forests of Taxus baccata is preserved do not seem to affect yew woods in particular. Likely the reason for this is the fact that yew formations are found at remote areas, relatively far from rural populations with difficult access.

The yew *(Taxus baccata)* is a tree species that the local population of Western Galicia respect and mainly this is due to its outstanding longevity and its toxicity in human beings. Therefore, many of these trees have been used to decorate meaningful places in the rural population's daily life. For example, these preside over religious spaces (churches, graveyards), relevant gardens (houses, manor houses) and also public places (squares, fountains, etc.) This is a common aspect to other Iberian and European areas. Note that traditionally its use as windbreaker has been one of the most specific and widely known use in the North-western of Lugo. It has been used as windbreaker to protect their dwellings and the airas (threshing floor) in which the so-called palleiros (straw lofts) were produced.

The emergence of other recent pressures and threats are to be mentioned, such as the excessive number of visitors (they are mainly tourists). As a result of that, vandalism signs can be seen in some branches of large Taxus baccata trees. The appeal of these long-lived individuals of yew trees sometimes urges visitors to climb its branches to snap a photograph that immortalizes their visit and in turn large branches are broken and pulled out. There are cases though when visitors made further damage by making wood carvings and inscriptions into their branches which lead to the tree debarking and wounds at xylem and phloem level.
In any event, the several trails left by the excessive influx of tourists stepping on some of the yew woods they visit restrict the growth of vegetation comprised of the undergrowth characteristic species. Not only that, in case of large parties, the high-pitched noise they generate results in a deterrent effect on wildlife.

Additionally, yew woods have been scientifically appealing which is reflected by the large number of surveys conducted on its botanical, dasometric and ecological values. What, in itself, can be considered as a positive thing, occasionally it produces negative outcomes, and e.g. scientific non-biodegradable material (containers, bags, etc.) is left in the yew woods.

In other cases, the side of a road/power infrastructure is present and this may lead to damage to the yew tree feet that make up the tree strata. On top of this, there is a source of contamination derived from uncontrolled waste dumped from the said infrastructures.

## Current threats:

However, the severe fires occurring in summer time, which devastate large areas of the Western Galicia Mountains, are the main threat for these forests. Occasionally, these fires cause considerable damage to large areas of the types of habitat the European Community is interested in and which are included in **Annex I of the CD 92/43/EEC**. Actually the LIFE BACCATA Project recognizes them as one of the most severe threats these forests face and suggests carrying out Action C5 to mitigate the formations risk of caching on fire which consequently would cause important damage to its conservation status.

As a result of this survey to diagnose pressures and threats, it is possible establish some action proposals:

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| Avoid silviculture practices that reduce the area occupied by habitat 9580* and which affect negatively the conservation status of the type of habitat, according to the Master Plan of Galicia Natura 2000 Network **(Decree 37/2014).** |
| Apply conservation and recovery measures in the habitat 9580* that are especially aimed at increasing the area occupied by such and capable of generating a favourable conservation status for the type of habitat. |
| Regulate the influx of tourists who visit the yew woods when they affect significantly the conservation status of the type of habitat. To this end, maximum quotas, seasons and routes should be established according to the estimated load capacity of these tree formations and according to the Master Plan of Galicia Natura 2000 Network **(Decree 37/2014).** |
| Conduct scientific activities in yew woods that are dully approved by the competent body in nature conservation affairs by establishing timelines, routes, visits, etc. Furthermore, leaving scientific material on the ground should be banned obviously and its removal should be an obligation, in virtue of the Master Plan of the Galicia Natura 2000 Network **(Decree 37/2014).** |
| Establish some control areas within yew woods (9580*) for the herbivory when it causes damage to the habitat (9580*) structure and floristic composition. This action would help to recover the vegetation made up of the undergrowth characteristic species and therefore the structure and composition of the type of habitat 9580*. |
| Avoid any silviculture actions in the tree canopy of yew woods that may involve an associated increase of the number/fast growth of the type of habitat 9580* non-characteristic tree species. These actions should be considered as non-appropriate for the maintenance of a favourable conservation status according to the Master Plan of the Galicia Natura 2000 Network (Decree 37/2014). |
| Implement actions to help minimizing the risk of forest fire occurrences that may affect significantly the conservation status of habitat 9580* to improve their future prospects and therefore to attain a favourable conservation status. |

# 4. Collection, storage and cultivation work for the habitat 9580* characteristic species in Galicia was completed.

July 8th, 2019

The aim of the LIFE BACCATA project is to improve the conservation status of the habitat 9580*, in 15 SPAs of the Cantabrian Mountain Range, by focusing on the habitat conservation status indicators: 'area of occupancy', 'structure and functions' and 'future prospects'. In Galicia the action plan takes place in 15 ha of the MVMC of Riocereixa (Pedrafita do Cebreiro, Lugo) within the Os Ancares – O Courel (ES1120001) SPA. A reforestation pine grove will be removed **(Action C2)** in this area and the habitat 9580* type will be restored through a forest plantation made up of its characteristic species (Action C3). With this action, those conditions affecting the habitat type will be eliminated and its occupied area will increase. Likewise, its structure, composition and connectivity will improve and all together will result in an improved conservation status.

In order to plant the forest species of the habitat 9580*, and given this is a designated Natura 2000 Area, it was necessary to use reproductive forest material (RFM) compatible with the local gene pool. To guarantee the said compatibility, in the project it was suggested to use the RFM right from the municipal, communal woodlands (MVMC by the Spanish acronym) of Riocereixa. The action involved collecting stem cuttings and seeds from the tree species that characterize the habitat 9580* in the said MVMC, according to the Galicia Habitat Manual ***(Taxus baccata, Quercus petraea, Fagus sylvatica, Betula pubescens, Sorbus aucuparia, Ilex aquifolium, Corylus avellana)*** for its subsequent storage, preservation and cultivation **(Action C1).** This action was conducted by IBADER, from the University of Santiago de Compostela, who relied on external assistance when going through those stages that required it.



During the first stage, the RFM from the habitat 9580* characteristic species according to the Galicia Habitat Manual ***(Taxus baccata, Quercus petraea, Fagus sylvatica, Betula pubescens, Sorbus aucuparia, Ilex aquifolium, Corylus avellana)*** was collected. To determine the amount of plants needed, the total reforestation area and the ratio of dominant and accompanying species of this type of habitat according to the **Galicia Habitat Manual** were calculated. The timeline for the collection work excluded the critical periods affecting the species of conservation concern that live in habitats within the RFM collection areas.

Plants are brought to the nursery after being collected during the first stage. Then, the plant storage and preparation work begins so that it is cultivated and fattened afterwards. Seed species were cultivated relatively easily, in seedbeds. Seeds were sown in trays for an organized and control germination (with shading or nursery mesh, vermiculite and perlite substrate, controlled irrigation and moisture, etc.) and this way plants grow smoothly until they are ready for reforestation. In case of plants coming from stem cuttings, these are prepared, cut and treated to produce plants through cuttings.

The whole process, which started in 2017 and ended in the spring of 2019, allowed the production of forestry plants of sufficient quality and quantity to assure the reforestation of 15 ha of MVMC in Riocereixa, the purpose of the project. The production figures per available plant species of LIFE BACCATA in the Galicia corresponding location are the following:

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| ***Betula pubescens*** | › 3.000 plants |
| ***Fagus sylvatica*** | › 2.000 plants |
| ***Quercus petraea*** | › 2.000 plants |
| ***Sorbus aucuparia*** | › 1.000 plants |
| ***Ilex aquifolium*** | › 1.000 plants |
| **Corylus avellana** | › 200 plants |

The produced plant is suitable for reforestation use because it is kept in a forestry container, its height and diameter are adequate, its root is largely developed, and rolling is not significant because the container is sufficiently big to allow a smooth root growth.

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# 5. Upgrading works in the Cantabrian yew woods of Burgos are making good progress

July 2nd, 2019

Burgos bears a great potential for the yew habitat (HIC 9580*) given its biophysical, biogeographic and ecological conditions and the large number of yew woods found in and out of the **Special Conservation Areas (SPAs) confirms that.**

The matrix holding these yew woods is so vast that others species are growing in it, e.g. beech forests, oak forests, Scot and resinous-type pinewoods, gall-oak forests, holm-oak forests etc. All of them are enhanced by the participation of an ample range of species of different lithological characteristics and influenced by different climatic conditions that range from a more Atlantic regime to the sub-Mediterranean regimes which the Ebro River Canyon contributes.

The yew wood cluster situated in the north-east end of the province features a smooth relief and a significantly lower elevation compared to the rest of the Cantabrian yew woods in Castilla y León (ranging from 676 to 439 m above sea level). In this area and more particularly in the SPA so-called Bosques del Valle de Mena' (ES4120049), three stamps were characterized in the framework of LIFE BACCATA. It was agreed to intervene in the stamp so-called Sarón', located in a town named Arceo.

The Sarón yew forest is under a very thick beech tree canopy. Actually the yew tree cover makes up the lower stratum. The beech tree forest is so thick that in several areas yew trees chocked and died. To provide additional space to some yew trees, the Regional Government in Environmental Affairs asked to girdle those beech trees that were growing on top of the said feet.

Another problem that hinders yew proliferation is herbivores' pressure on its regeneration. Nowadays such pressure is not as obvious as it was some years ago because in 2007 a fence (about 1.22m high) was installed to protect the yew tree forest from domestic livestock. It was successful. Even so, recently it is possible to see some small yew trees with signs of herbivores' bites, mainly roe deer and deer. The fence worked efficiently on livestock but not on these wild herbivores because they can jump over it rather easily (especially deer). Furthermore, in some areas the fence is leaning due to the creeping terrain or because trunks push it down which enable their entry.

Aimed at protecting the yew regeneration from wild herbivores, a proposal was made in the framework of LIFE BACCATA Project that involves the replacement of the current fence with a hunting fence using stakes of 2.5m high and a mesh of 2.0 m.

To avoid producing any debris and to use up the current mesh that is well grounded, the new fence was installed to intermingle with the existing one. Meanwhile the existing stakes were reinforced and those for the new fence were installed among the existing ones. The current mesh will be raised up to 2.0 m, the target height. This new fence will prevent the access to deer which can be considered the main browser on regeneration. Fence installation work first started in mid-June and likely it will be completed by early July.

# 6. Annual visit of the NEEMO monitoring team.

May 20th, 2019

On the 20th and 21st of May the monitoring team of LIFE BACCATA Project, NEEMO, went to Pagoeta-Aralar, Guipuzkoa, for their annual monitoring visit. The meeting was used to review the LIFE BACCATA Project administrative, financial and organizational actions which include a technical visit to Pagoeta where actions are already being implemented.

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SOCIOS

LIFE15 NAT/ES/000790

ADMINISTRACIONES COLABORADORAS

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