LIFE Lugo + Biodinámico

At the forefront of **sustainable** urbanism

Arboretum of autochthonous woody species

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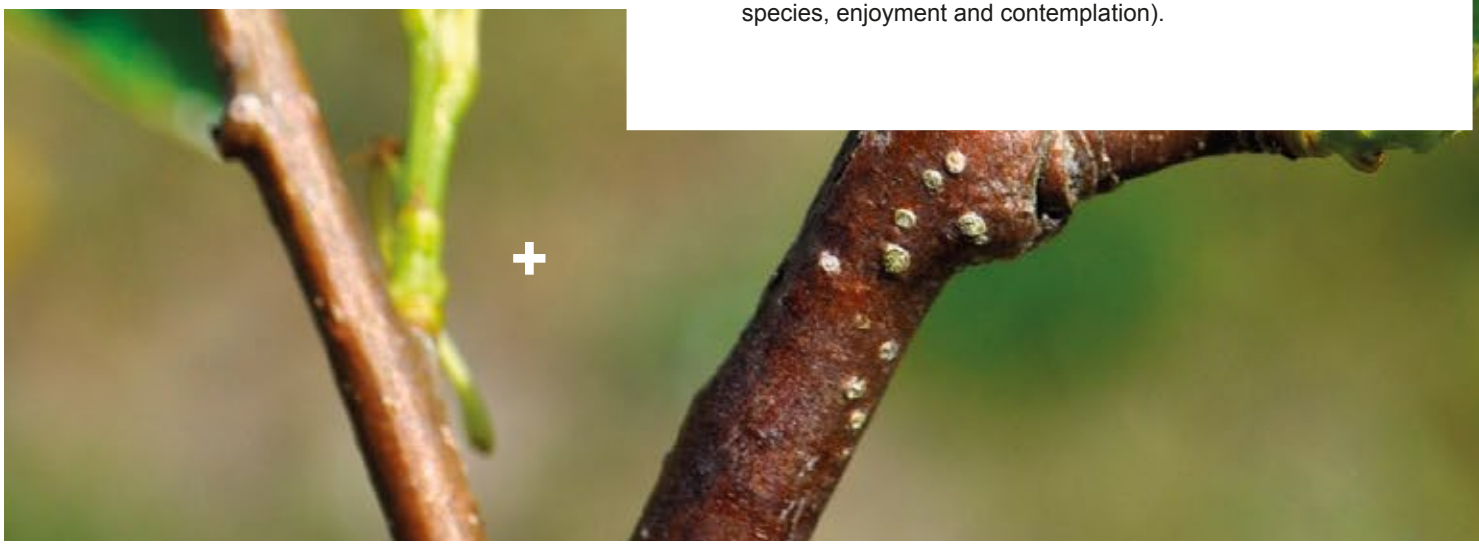
LIFE Lugo + Biodinámico is a European project promoted by the Concello de Lugo, pioneer in eco-sustainable planning in medium-sized cities, taking advantage of the use of natural resources and boosting the green economy. Among the measures to be developed are the construction of the first public building built with Galician wood, the design of the first multi-ecological neighbourhood in Spain and the elaboration of a catalogue of sustainable urban solutions, exportable to other European cities.

In addition, informative spaces will be created for the scientific community and society in general with plantations of tree species and autochthonous shrubs that demonstrate their potential for the development of sustainable urbanism.

An **Arboretum** is defined as a plantation of trees and other woody plants intended for scientific purposes (such as the study of their growth, their adaptation to the climate and soil, the improvement of biodiversity, the landscape) and didactic (area of conservation and knowledge of species, enjoyment and contemplation).



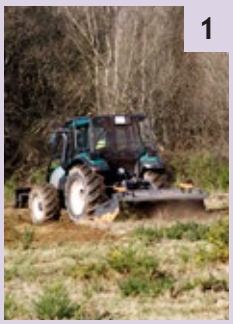
In the industrial estate of As Gándaras (Lugo), an Arboretum of native woody species was established in 2018 for educational, cultural, landscape, biodiversity enhancement, protective and recreational purposes.

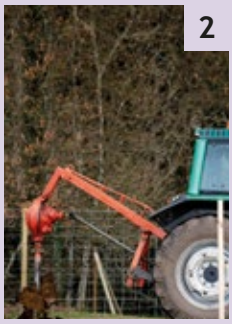
The Arboretum of As Gándaras occupies an area of approximately 5 ha and in it more than 55 different species of autochthonous trees and shrubs can be identified.

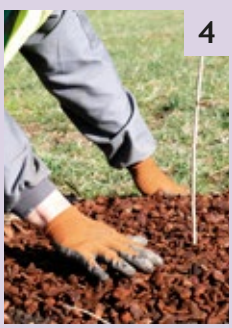
The distribution of the plants simulates 8 different Galician forests, ordered with an altitudinal criterion.

Phases of plantation establishment

1. Mechanized friction
2. Digging
3. Plantation
4. Placing mulching of pine shells
5. Placement of protectors







The different types of Galician forests represented in the Arboretum

A **Riverbank Forest**, where willows, poplars, ashes, elms, hazelnuts and almonds are mixed...

In the Arboretum we can contemplate a natural riverbank forest of the area and the planting of species of this type of forest...

A **Pyrenean Oak Forest**, dominated by the presence of Pyrenean oak (Quercus pyrenaica) and in which we can also find chestnut trees, rowanberries, heather...

Heath

A **Mediterranean Forest**, where the holm oak (Quercus ilex subsp. boleta) and the cork oak (Quercus suber) coexist with alder buckthorn, holly, strawberry tree, terebinth, rockrose and laurels.

Holly

Common Oak Wood, where the common oak (Quercus robur) coexists with ashes, cherry trees, birches, laurels...

Oak

Oak Grove Forest, dominated by the presence of sessile oak (Quercus petraea) and in which are also sycamore aceres, beeches, archery...

A **Beech Forest**, in which the beeches (Fagus sylvatica) are accompanied by holly trees, yew trees, rowan trees...

A **Mixed Forest**, with the presence of hazelnuts, ashes, cherry trees, oaks, elder trees...

Beech

A **Birch Forest**, where birches (Betula pubescens) are mixed with cherry trees, rowan trees, holly trees, heather...

Other areas

In the Arboretum we can also find **scrub** species that are habitat for small mammals and different birds, with species such as gorse (*Ulex* spp.) and black brooms (*Cytisus* spp.).

It also includes an area of **aromatic plants** where you can enjoy the aromatherapy offered by species such as rosemary (*Rosmarinus officinalis*), sage (*Salvia officinalis*), butcher's broom (*Ruscus aculeatus*), laurel (*Laurus nobilis*), thyme (*thymus* spp.) among others.

Recommended itinerary and signposting

In our tour through As Gándaras' Arboretum we will find different types of panels and labels that will guide us and facilitate the knowledge and identification of the different forests represented and the species of the same that form part of the Arboretum.

Plant formations represented:

Zoning:

1. Mediterranean forest.
2. Pyrenean oak forest.
3. Riverbank forest.
4. Aromatic plants.
5. Autochthonous riverbank forest.
6. Common oak grove.
7. Oak grove forest
8. Beechwood.
9. Mixed forest.
10. Birch forest.
11. Thicket.

1. Indicator panel

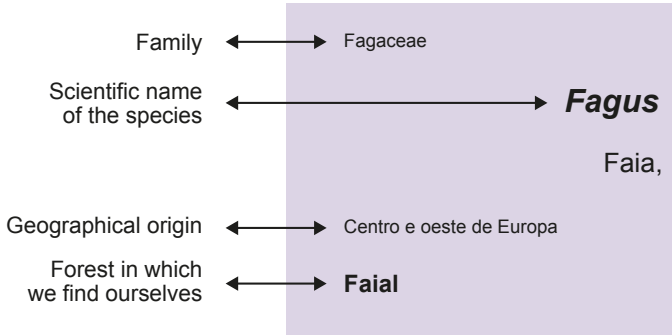
There are two indicator panels at the beginning and end of the recommended route. These panels show the general plan of the Arboretum and the distribution of the different established groves.

2. Interpretation tables

The interpretation tables are placed at the beginning of each of the groves. They describe the main characteristics of the forest in which we find ourselves and some of the species present in it. They also allow us to differentiate the beginning and end of each grove.

3.Identifying labels

Next to each specimen of the Arboretum we will find an identifying label that shows us the following information:



1. Scientific name: it is a universal name, the same for everyone. With this name we can know which plant we are referring to anywhere in the world. The scientific name consists of two Latin words:

The genus: in our example it would be *Fagus*

The species: in our example it would be *sylvatica*

2. Family: a category that groups together several genres with similar characteristics.

3. The common name is the one with which a plant is known in a certain part of the world so it can vary from place to place.

4. QR: link to online information on each of the species.

Programme of actions

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URBAN PLANNING ACTIONS	
C1	Urban Design Solutions Catalogue
C2	Strategic plan for ecological infrastructures: Special Biodynamic Plan
C3	Detailed planning of residential climate comfort zones (RCCZ)

DEMONSTRATIVE ACTIONS	
C4	Hardwoods
C5	Energy crops
C6	Souto. Chestnut trees of traditional varieties
C7	Restoration of a wetland - NALI (Natural Area of Local Interest)
C8	Arboretum
C9	Urban agriculture
C11	Impulso Verde Building

Impulsed by:

Concello de Lugo

Financed by:

Concello de Lugo

DEPUTACIÓN DE LUGO

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Project partners:

USC UNIVERSIDADE DE SANTIAGO DE COMPOSTELA

POLITÉCNICA

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