

# SCAPEFIRE

A sustainable landscape planning model for rural fires prevention  
*Um modelo sustentável de Ordenamento do Território para a prevenção dos incêndios rurais*

## Scientific Journey Project FCT – Scapefire:

Sustainable landscape planning model for rural fires prevention  
(PCIF/MOS/0046/2017)

### Scientific Journey on Native Oak Forest - *Functions, Forestry and Applications*

#### Project Bosques –Close-to-Nature Forestry applied to Oak Forests

On June 24, 2021, a scientific day and work meeting of the FCT Project – Scapefire (Foundation for Science and Technology) was held in the Mondego and Garcia Joanes oak woods, both part of the Project Bosques. This project involves the Municipality of Guarda, Trancoso, Meios, Videmonte, Trinta, Feital, and the ICNF (Institute for the Conservation of Nature and Forests).

The Scapefire project aims to investigate and propose a sustainable spatial planning model for the prevention of rural fires, also relating to elements of forestry enhancement. Several higher education institutions, organizations and municipalities participate in this project. An important component in this project is oak woods due to its low combustibility, high strength and resilience.

This advance is combined in the *Project Bosques* which is being developed by the Luzlinar-ARS Association within a partnership with UTAD (University of Trás-os-Montes and Alto Douro). This project involves research, development and promotion activities related to oak as an ecosystem of the original Portuguese forest that allows the simultaneous provision of multiple ecosystem goods and services, with broad ecological, economic and social benefits. It also involves different cultural aspects, as well as the improvement of the natural landscape characteristic of the territories.

Several topics were covered in this workshop, with the possibility of observing local achievements and activities related to the use of oak wood in high-value applications, as well as other important goods and services of the ecosystem and the applied silviculture, with scientific and technical information. The application of close-to-nature forestry is also highlighted in both projects, in this case to the oaks, which fits, among other measures, in the EU Green Deal as a sustainable development strategy for Europe.

## Program

### *Native Oak Forest: Functions, Forestry and Applications with Wood*

Topics: Oak ecosystem. Goods and services. Close-to-nature forestry. Applications with oak wood.

Subjects and Visiting Steps:

#### **Stop 1 – Applications of oak wood in carpentry and structures.**

Applications of oak wood in added-value products. Use of wood in construction and carpentry.

Applications:

- . Panel - Outdoor Furniture
- . Shelter cabinet - Structure, Carpentry

#### *Panel*

Sign and reception panel using oak wood. Example of use in outdoor applications.

#### *Shelter cabinet*

Small size sustainable and self-sufficient housing project developed on four basic concepts: Flexibility, Sustainability, Shape and Mobility. It is based on a volumetric and functional approach that promotes a synergistic relationship with the natural context.

#### **Stop 2 – Oak Forest.**

General ecological and forest characteristics. Close-to-nature forestry. Transitory transformation phase. Integration of functions.

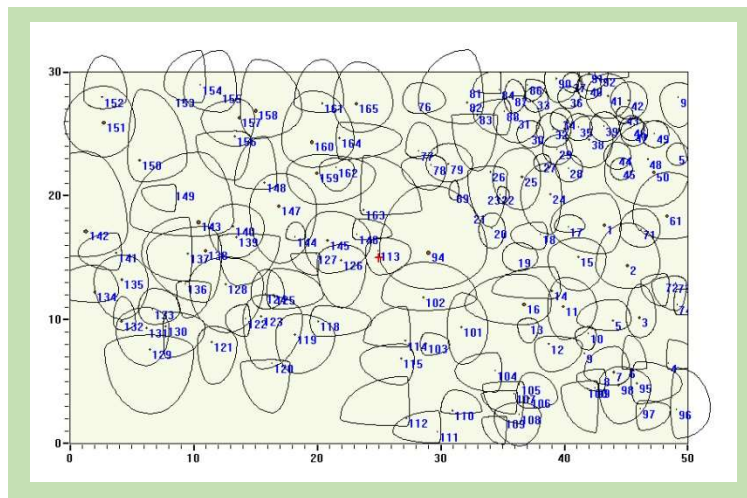
Locations: Meios and Garcia Joanes.



Scientific meeting and journey.



Pyrenean-oak forest (*Quercus pyrenaica* Willd.)



Demonstration unit of close-to-nature silviculture applied to oak.

Pyrenean-oak wood applications. Wood uses in high added-value products.







Biodiversity and social functions associated with the original Portuguese forest.