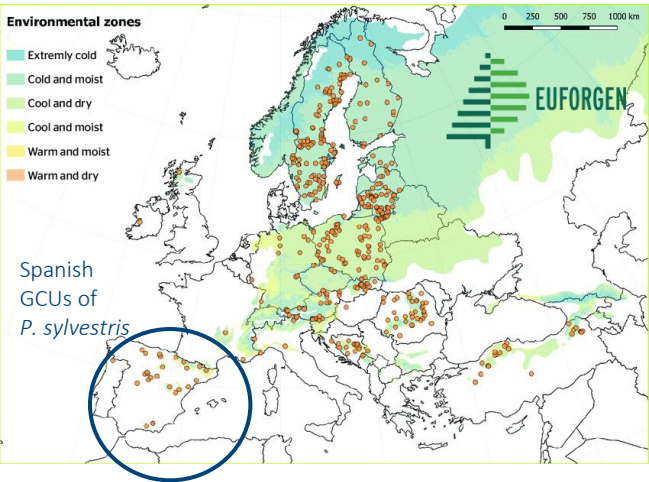


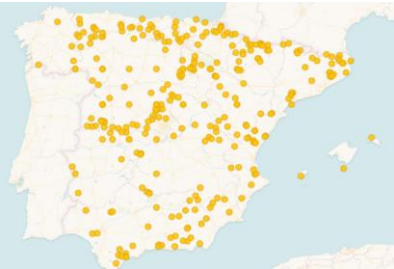
In situ conservation

Genetic Conservation Unit (GCU)

- A population or group of individuals of the same species in its natural habitat.
- Occupies a defined and genetically isolated geographic area.
- Dynamic management is practiced with the aim of conserving its genetic diversity and uniqueness.



European Network of Genetic Conservation Units of *Pinus sylvestris* (modified from Lier and Schuck, 2020. *Forest Europe*).



Spanish Network of Genetic Conservation Units (298 GCU of 20 species in 2026)



GIS viewer

MITECO +
ICIFOR-INIA, CSIC

Ex situ conservation

Preferred duplicate of accessions of conservation interest.
Facilities in Centres for FGR.
Prioritisation of in situ GCUs for ex situ conservation based on marginality and current and potential threats.
Guidelines conservation ex situ for FGR.



Composed by Central node + participants
Coordination with participants
Currently working on the data model.



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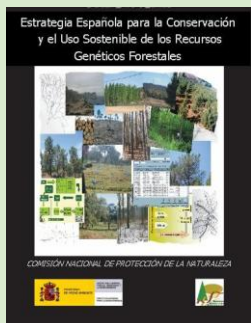
Conservation and use of Forest genetic resources in Spain

This leaflet explains and summarizes the main activities related to conservation and use of forest genetic resources in Spain, specially carried out by central government (Unit of Forest Genetic Resources, Ministry for Ecological Transition and Demographic Challenge).



According to Spanish Forest Law the central government manages conservation and breeding programs of national interest in coordination with regional governments. The coordination body is the National Committee for breeding and conservation of FGR.

Strategic and planning documents at national level



Spanish Strategy for Conservation and Sustainable Use of Forest Genetic Resources (2006)

Established tools, measures and action plans



Plans of action (2024 - 2033)



Conservation of FGR



Forest Breeding



Forest breeding programs

In Spain breeding programs are managed by different public and private entities. However, main part of them are carried out by public institutions, such as research centers and regional governments. Central State (MITECO) manages and coordinates directly breeding programs according to Spanish Forest Law.

Working groups on breeding

Currently there are three working groups related to breeding coordinated by Ministry:

WG on conifers

- Species: *Pinus pinaster*, *P. sylvestris*, *P. nigra*, *P. halepensis*, *P. pinea*...
- Purposes: wood production, tolerance to pests, pine nut production (for stone pine)

WG on Mediterranean *Quercus*

- Species: *Quercus ilex* and *Q. suber*.
- Purposes: tolerance to oak dieback (*Phytophthora cinnamomi* and drought), cork and acorn production.

WG on new pathogens

- Species: *Ulmus* spp., *Fraxinus* spp., *Alnus* spp., etc.
- Purposes: tolerance to new pests and diseases.

Network of Centres for Forest Genetic Resources

They contain the means for carrying out all the breeding and *ex situ* conservation programs, production and supply of forest seeds, mycorrhization, experiments, etc.



Puerta de Hierro (Madrid)



Valsain (Segovia)



El Serranillo (Guadalajara)



Alagüés (Valencia)