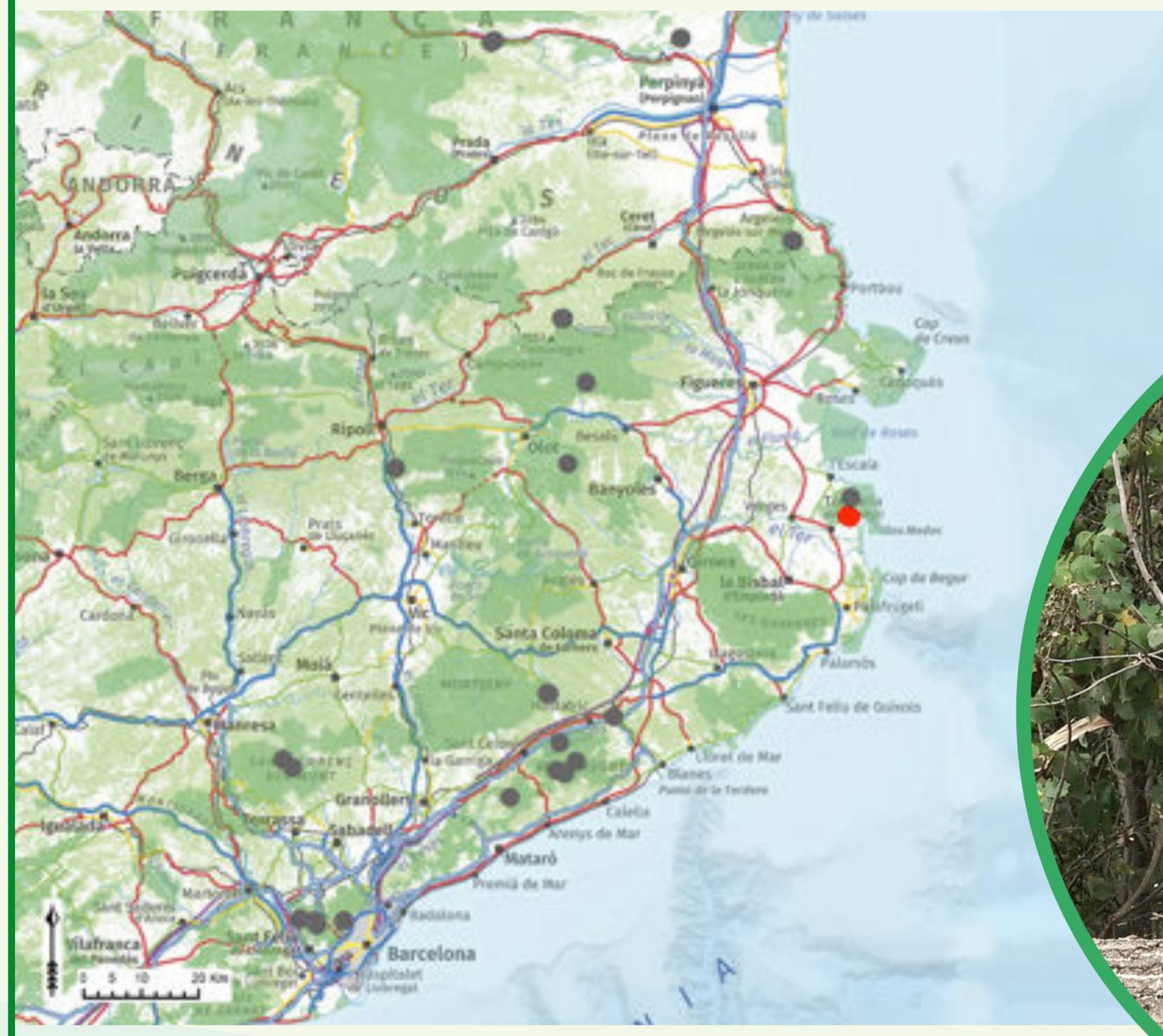




MAIN OBJECTIVE

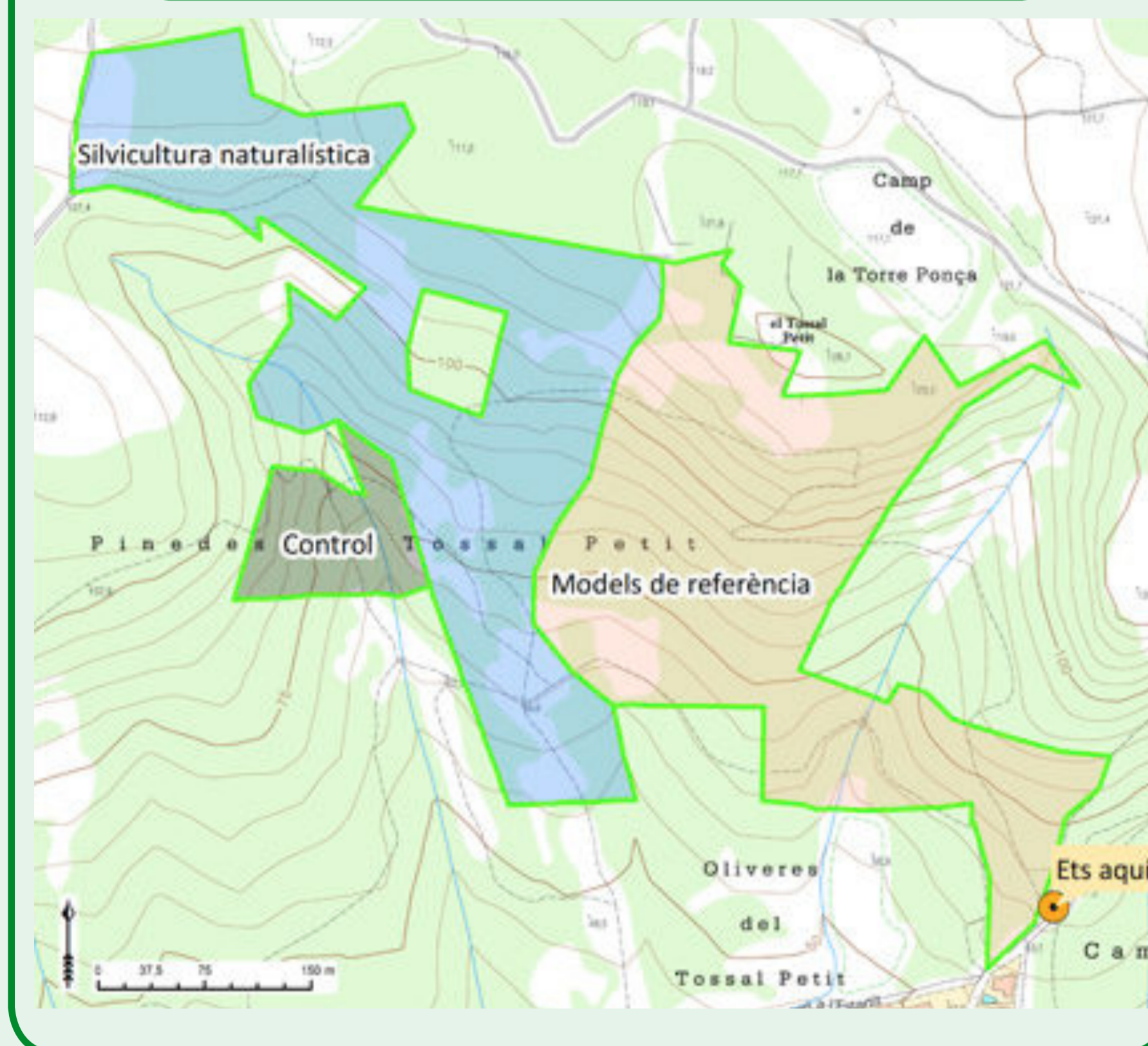
To improve the biodiversity of the Mediterranean forests through the integration of innovative practices into forest management, making its environmental and socioeconomic values compatible and guaranteeing their adaptation to climate change.

WHERE DOES THE PROJECT OPERATE?



Location of demonstration stands "Muntanya Gran" (red) and the rest of the project stands (gray) within the Natura 2000 Network.

YOU ARE HERE



BRIEF DESCRIPTION OF THE STANDS

Management model	Forest type	Actions
Stand-scale guidelines	Aleppo pine (<i>Pinus halepensis</i>) pure stand	- Selective shrub clearing - Punctual thinning of competing pines - Retention of key elements
Close-to-nature silviculture	Aleppo pine (<i>Pinus halepensis</i>) pure stand	- Selection of future valuable trees and regulation of competition - Selective thinning - Regeneration regulation - Retention of key elements - Deadwood generation

These stands belong to a private estate with a management plan.



Dendrocopos major

WHAT IS BEING DONE IN THIS AREA?

Management based on stand-scale guidelines

Since 2004, due to the need of forest management support tools adapted to the Catalan context, ORGEST (Guidelines for Sustainable Forest Management in Catalonia) have been developed.

Depending on forest formation, site quality of each stand and the preferred management objectives, reference management models are offered at stand scale for developing forestry actions. Until 2020, a total of 157 reference models have been generated for 32 different forest formations, integrating the different objectives and ecosystem services they can offer.

Reference models are detailed silvicultural pathways for all stages of forest development, and promote various objectives, such as production, fire prevention and structural and species diversification, to move towards more resilient forests that are more resistant to climate change impacts.



Close-to-nature silviculture

Close-to-nature silviculture aims to take advantage of natural dynamics and processes to produce goods and services with as little interventions as possible. It is guided by the following principles:

1. To consider individual trees and small groups according to their role in the forest, their future potential and the best time for harvesting.
2. To maintain a permanent tree cover by giving up simultaneous renewal actions over large areas.
3. To harvest fewer trees, but larger and with higher value.
4. To achieve natural regeneration, pruning and natural selection through a structure that combines trees of all sizes and functions.
5. To achieve heterogeneity of structure and species composition as a result of individualised management (adaptation to local micro-conditions).
6. To reduce the intensity of actions, making them more detailed and high-quality, with cost reduction and economic efficiency as the main criteria.

POTENTIAL BIODIVERSITY DIAGNOSIS IN THE STAND

We use the Potential Biodiversity Index (IBP) to facilitate the application of forest management techniques that favour biodiversity conservation in the stand.

With IBP we diagnose the state of valuable elements for the biodiversity of a stand, with the evaluation of 10 factors that influence the capacity to host species (animal, plant and fungi), which are assigned a score from 0 to 5. Within the factors that make up the index, 7 can be modified by forest management, so that according to the score assigned to each of them, a specific action design is carried out to favour the elements that are scarce and to conserve the most abundant ones.

This graph shows the result of the diagnosis in this stand, with the weight of each factor. The final objective of the implemented treatments in the stand is to ensure that the managed stand has the greatest possible diversity of habitats, guaranteeing continuity in space and time.

