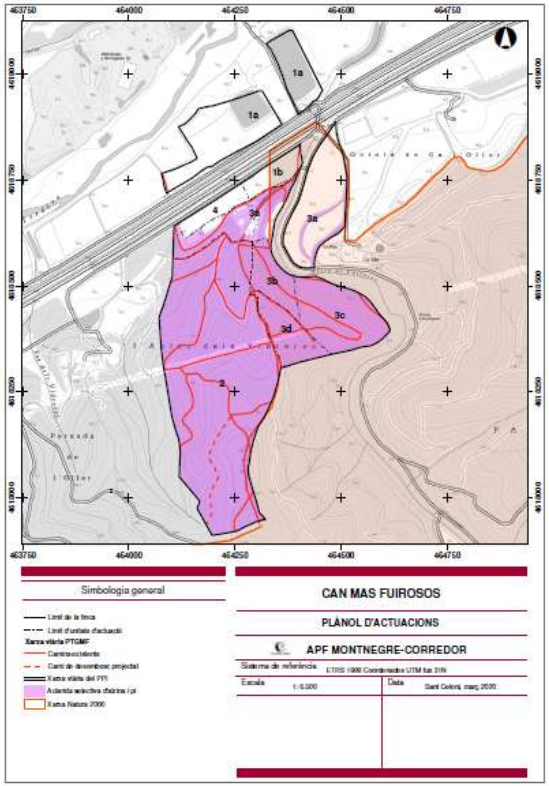
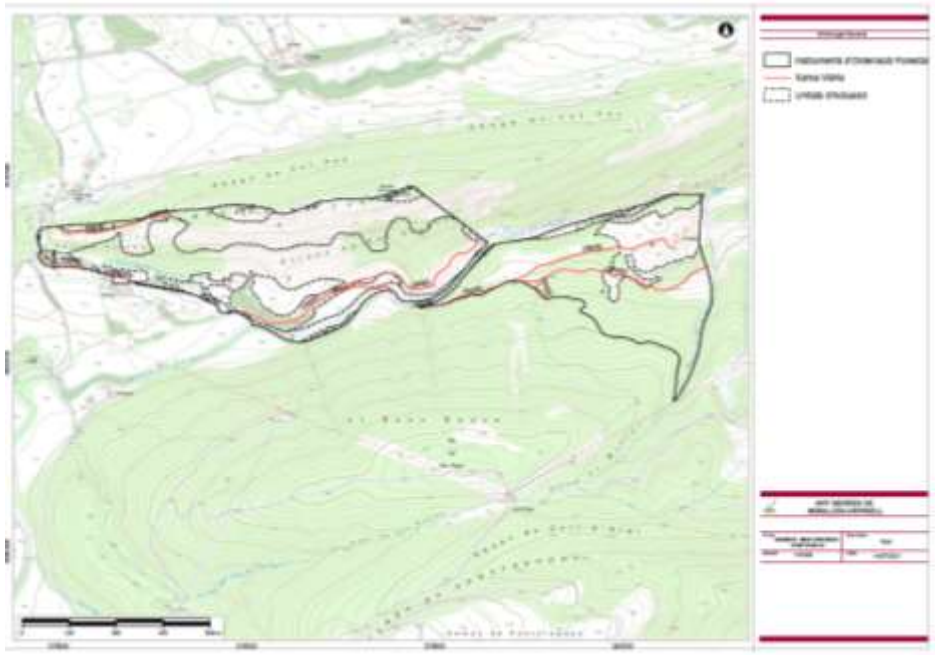
PRACTIC CASES OF CTFC NET4FOREST TOOL-KIT

For the practice study cases, we'll show two different forest sites that complimented the Joint Forest Managment Plan.

Can Mas Fuirosos. Sant Celoni (Barcelona)



Mas d'en Bosc Orpi i Can Vilella (Tarragona)

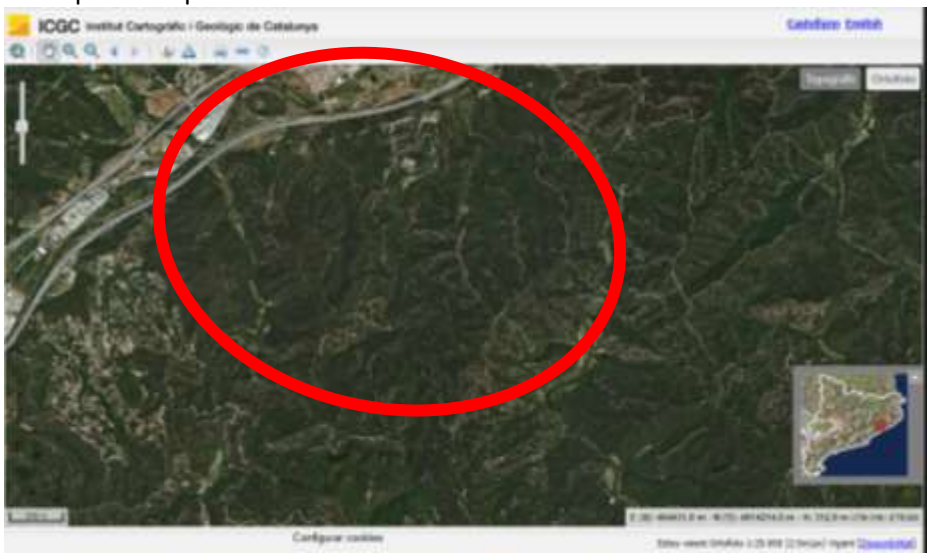


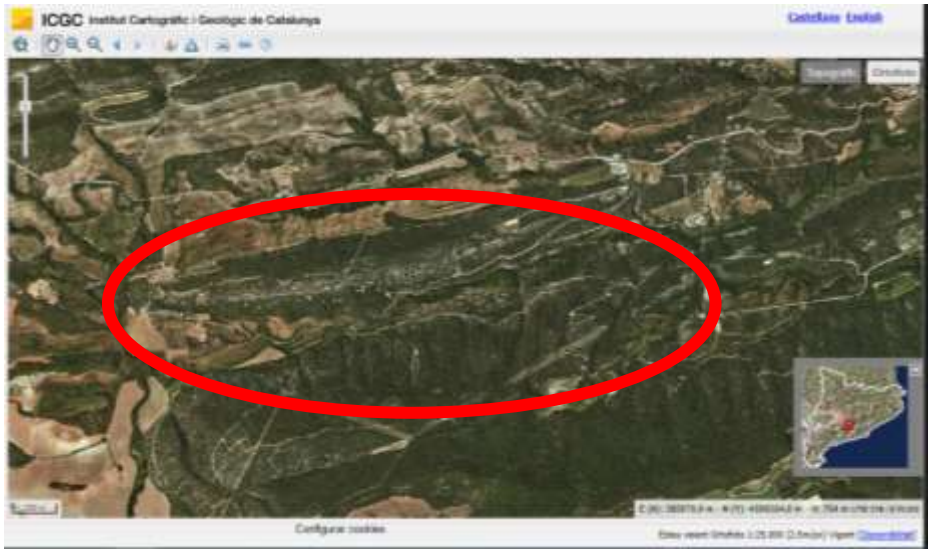
Co-funded by the Erasmus+ Programme of the European Union

PRACTIC CASE – JOINT FOREST MANAGMENT PLAN

Net Forest
Network of knowledge for efficient private forests

Orthophotomap of the sites. Source: ICGC





CTFC

Co-funded by the Erasmus+ Programme of the European Union

Net Forest Network of knowledge for efficient private forests

Forest Station

- Medium-high quality
- Growing up to 5-6 m^3.Ha/year
- Forest species:
  - Holm oak (*Quercus ilex*)
  - Oak (*Quercus humilis*)
  - Cork oak (*Quercus suber*)
  - Stone pine (*Pinus pinea*)

- Fresh Mediterranean-Continental Climate
- Average Precipitation: 600 mm/year
- Deep Silicic sandy soil

Forest Station

- Low quality
- Growing between 2-3 m^3.Ha/year
- Forest species:
  - Aleppo pine (Pinus halepensis)
  - Holm oak (Quercus ilex)

- Dry Mediterranean climate
- Average Precipitation: 400 mm/year
- Superficial Limestone soil

Both sites relay on the Joint Forest Management Plan to overcome their lack of profitability and management against wildfires. This type of plans offers crucial management actions beyond property limits. This benefits directly to the forest by working at ecosystem level and clearly contributing to wildfire prevention and profitability stands while maintaining the environmental and sustainable scope.

Similarities

- None of them had a Forest Management plan.
- Small surface fragmented parcels with less than 25 Ha.
- Both sites have low wood production in quantity and quality.
- Fire risk is very high due to abandonment of the forest.
- Without any subsidy, actions would take high amount of money which costs many years to recover.
- Forest density vegetation is very high, and the tracks are narrow for a big transport.
- Transport of wood is the main cost of the exploitation. Nearly the 50% of the benefits of forest exploitation.
- Main roads are near, but sawmills are far away and that decrease benefits. Transport costs goes from 13 to 17 €/Tm.
- Low production of forest exploitation per year in surface and quantity and quality of wood (Ha - Tm/year).
- Biomass, firewood, or pallets are the most common use of wood because of the morphology and management of the forest.
- Low quality forest products give low incomes to the forest owners. Little or no forest capitalisation.

Co-funded by the Erasmus+ Programme of the European Union

- Forest owners don't want to explode their forest because the tough bureaucratic procedures.

Dificulties of Forest owners in low quality station forests.

- Transport takes nearly 50 % of the benefits of the forest exploitation, between 15 and sometimes 18 €/Tm.
- Tracks are narrow with much vegetation. This fact doesn't allow big trucks of transport remove the timber or chips of biomass, increasing the cost of transport. Only small (3-axle normally) trucks can pass with a small number of cubic meters, normally around 15 Tones. See photo below

Picture (left) of tracks after exploitation and (right) Truck loading logs for sawmill.

- Sawmills or industry for these forest products is far away, and the logs must be processed at the forest, increasing the cost of production.
- The average of saw wood production variates from 15 to 30 %. Diameters are normally small and most of the production non-commercial or first thinning.

Co-funded by the Erasmus+ Programme of the European Union

Picture (left) thinning of Aleppo pine and (right) aspect of the forest after second thinning (right).

Co-funded by the Erasmus+ Programme of the European Union

- The mosaic landscape plays a crucial role, also with the reduction of the fuel to fight against fire risks (see photos below).

Dificulties of Forest owners in low quality station forests

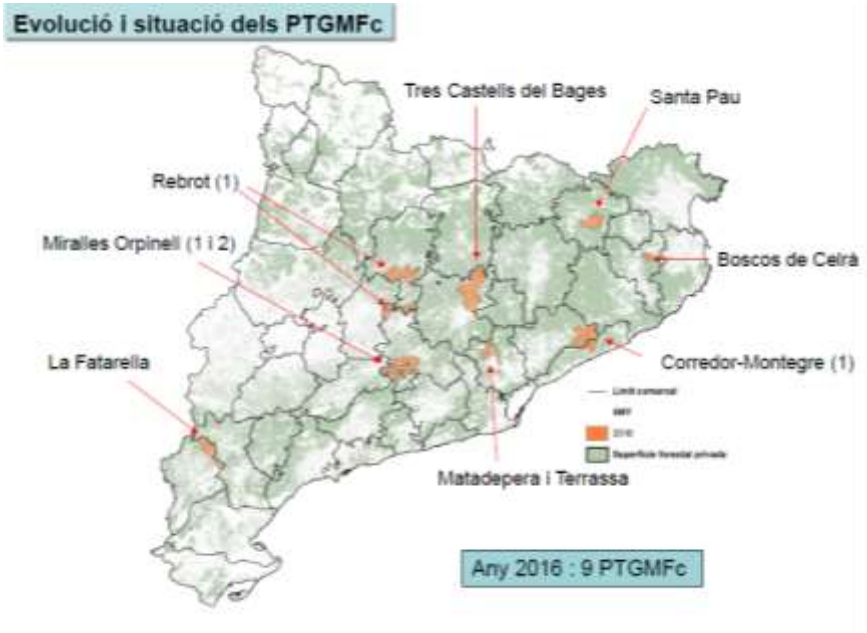
- For most of the forest owners, their main economic source is not forest, so there is a lack of interest and motivation for forest exploitation.
- Bureaucracy procedures plus low incomes demotivates forest owners to invest in forest.

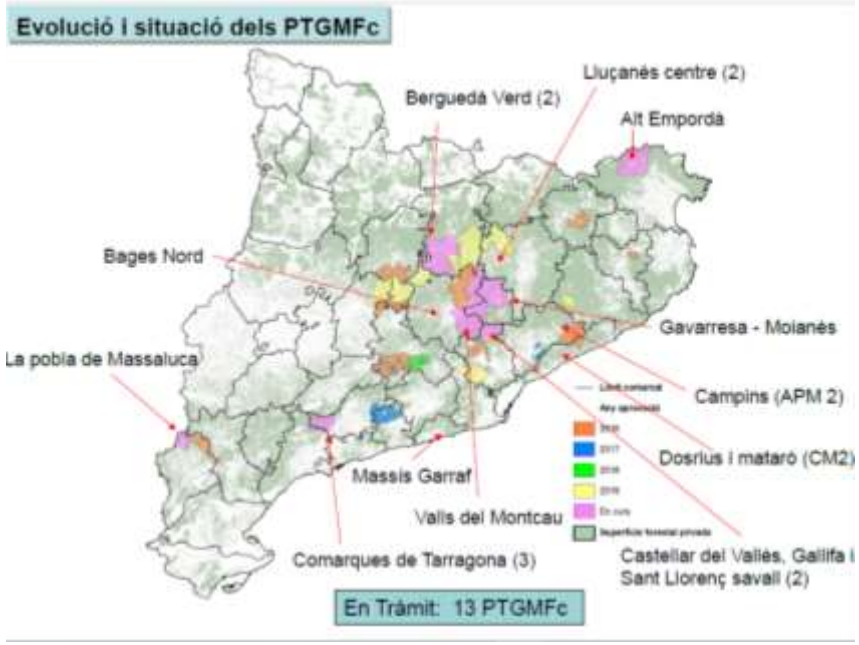
Reasons for Forest's owner to access into the Joint plan

- A joint plan can save time and money in the process of having a Forest Management Plan. From the study phase to bureaucracy till forest exploitation starts. A common technician simplifies this process to forest's owners and reduces the production costs.
- One of the main reasons is the result of the forest aspect after the exploitation works in the neighbours' site. The evolution is increasing year after year. See Evolution and Situation of the Joint plans from 2016 (left) till now (right) below.

PRACTIC CASE – JOINT FOREST MANAGMENT PLAN

Net Forest
Network of knowledge for efficient private forests





CTFC

Co-funded by the Erasmus+ Programme of the European Union

Pictures. Before (left). Thinning and fuel reduction (right) after the forest's works in Aleppo pine's forests.

RESULTS:

- Forestry surface managed according to climate situation and threats.
- Increasing profitability through the years.
- Decrease of the writing cost of the plan (shared writing costs between members of the joint forestry management plan).
- After good forest works and practices, the results also invite other neighbours to manage their forest. Cooperation between owners increase the surface and decrease the production costs. After 10 or 15 years, the forest become commercial with high diversification of products.
- Forest works anchors people to the territory economically.
- Fire risk decreases significantly after the management in Mediterranean forests.
- Help and guidance in forest management. The technician in charge of the plan will lead the management year by year in accordance to forest owners, which can be relieved from though works and headaches.

Co-funded by the Erasmus+ Programme of the European Union

- The technician in charge provides enterprises to implement the forestry works, allowing the owners to be focused on their main economic activities.
- Owners focused on their main economic source.
- Environmental benefits at all levels (non-managed forest vs. managed forest) as most of the plans include fauna and vegetation conservation actions such as water provisions for amphibians, bad nests, etc.
- Recreational and touristic benefits as old paths and sites of interest are cleaned and conservated, adding information panels if needed. Thus, the walkers learn about the ecosystem which they are visiting, together with the forest management actions provided and the cultural heritage of the site.