

# Wine producers as landscape wildfire stewards against wildfire

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Vineyards around Montserrat Natural park, Spain. Source: Shutterstock

## Productive firebreaks

Wildfires represent a recurrent threat to Mediterranean forests. Agricultural parcels amidst the forested landscape constitute a key fuel discontinuity, which is a crucial infrastructure for the fire responders to attack with security, and/or to modify the wildfire spread behaviour. Maintaining those fields active constitute a security service to parts of the landscape (WUI-homes, parcels of forests).

Yet, northern Mediterranean (particularly mountain) agriculture is progressively being abandoned, thus increasing forest continuity and consequently the risk of larger wildfires. The abandonment of agricultural land is accelerating because of the ageing of the farming population and the small size of the new projects of Neo-rural population. Then we have been able to observe during 21st century a deep change in agriculture social and physical landscape that will go on evolving these 20 next years.



Role of vineyards in wildfire spread in El Barral (Ourense), 28/06/2022. Source: SAMUEL CV.

## Findings

### 1 Vineyard managers and managers show concerns about wildfires.

Reasons are:

- potential losses in their yields or organoleptic characteristics,
- potential reduction of their scenic beauty linked to their enotourism,
- general awareness to their territory.

### 2 Vineyard + forest landowners:

Rural landowners sometimes do not own only agricultural parcels, but also forest plots. Yet, they tend to manage with lower intensity the latter -being either for limited knowledge, or limited profitability. This situation bridging both agriculture and forest domains represents also an opportunity for them to engage in risk-reduction practices.

### 3 General trends in agriculture towards mixed farming (chiefly, including grazing to control weeds), and towards agroecology production show **contrasting effects in the face of wildfires:**

Extensive grazing reduces available fine fuel (POSITIVE EFFECT), while Leaving grass for water soil maintenance during summer permits the fire spread within the vineyard (NEGATIVE EFFECT).

### 4 Need for good practices dissemination & networking

Wildfire-risk related good practices are so far **isolated**. There is need to recognise them and establish a network of agents interested in or exposed to the hazard.

### 5 Recognition (and reward) of the fire security service

It is necessary to **acknowledge the fire-spread retardant function** of those (vineyards) fields as a positive externality.

## Methodology

This exploratory study is based on in-depth interviews and field visits to wine-producers in Mediterranean Spain, Portugal and France



### Interviews of:



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**Cellars**  
All size cellars: from "vigneron independant" to international group

- 1 Llopart
- 2 Can Feixes
- 3 Mas Candi
- 4 Heretat Mont Rubí
- 5 Pardes
- 6 Oller del Mas
- 7 Abadal
- 8 Vinyes dels Aspres
- 9 Arché Pages
- 10 Espelt
- 11 Mas Martinet
- 12 Chateau Pech Redon
- 13 Chateau de Valcombe
- 14 Domaine Cazalis
- 15 Domaine de Mirabeau / Vignes de Cogne
- 16 Chateau Lascaux
- 17 Domaine de la Triballe



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**Stakeholders**  
Managing agriculture, forest & firefighting in wine areas, local research groups

- 1 Chambre Agriculture du Gard
- 2 SAFER Occitanie
- 3 Pôle DFCI ONP Hérault
- 4 ONF Pyrénées Orientales
- 5 SDIS 66
- 6 SDIS 34
- 7 Communauté de communes Grand Pic Saint Loup
- 8 VITEC
- 9 INCAVI



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**Natural parks**  
Or similar (hosting vineyards): management of agro forest landscapes

- 1 PN Cap de Creus
- 2 PN Montsant
- 3 Grand Site de France Concors Sainte Victoire
- 4 PNR Sainte Basime
- 5 PNR de la Narbonne / massif de la Clape



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**Designation of Origin**  
All scales: from regional to local, representation of wine areas

- 1 AOC Terrasses du Larzac
- 2 DO Montsant
- 3 DO Priorat
- 4 DO Bages
- 5 DO Penedes
- 6 AOC La Clape
- 7 AOC Pic Saint Loup

## Research Question

The vision of those agriculture producers on wildfires is hence crucial to activate fire-resilient landscape management.

**RQ1:** Which are the productive factors of vineyard managers and wine producers that relate to wildfire risk? Which are their concerns?

**RQ2:** Are them interested in engaging in fire-reduction measures?

**RQ3:** What is the existing support of administrations in this field? Is it necessary to improve it and how?



Vineyard in Agly Valley, Roussillon, France. Source: S. Darnay.

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FIRE-RES



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