



# Lo Forestalillo

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Situation of Forest Fires in Catalonia



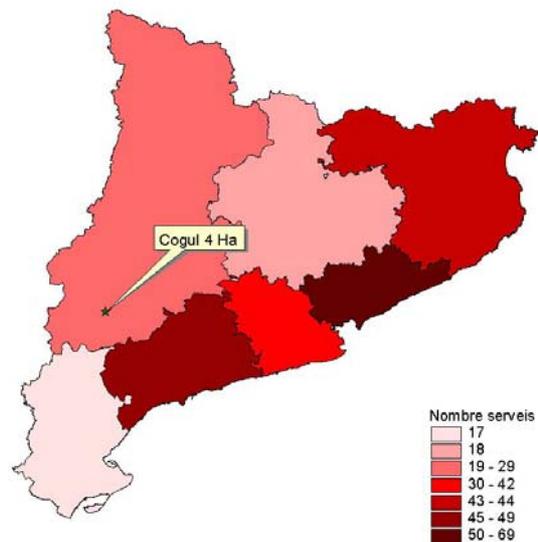
**Starting again the  
 rhythm of the fire  
 season!!**

*Inclined column due to the north-west wind in Vandellòs.*

## What we had

Compared tendency from 1/1/06:

	22/05/2005	22/05/2006
Nº Services (VA+VU+VF)	4058	1469
Surface (ha)	1662	2581



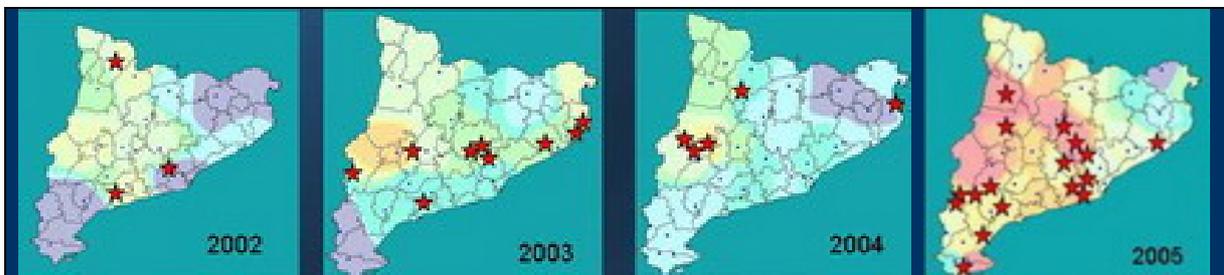
VA: services of agricultural fire  
 VU: services of urban fire  
 VF: services of forest fire

**Number of services (VA+VU+VF) from 8/05 until 21/05/06, and services larger than >2 ha.**

## Description de la situation

### Evolution of drought (availability of live fuels, and large dead fuels)

The drought of May marks the type of summer fire season we are preparing for (see figure 3). In 2005 the important accumulated drought facilitated that the fires became easily Large Fires. But the shortage of dry masses of air moving around and above Catalonia in a persistent way helped avoiding fires of more than one day of duration, and therefore reduced the simultaneity. However, both 2003 as 2004 started the season with a moderate drought but in 2003 a spring - summer with many warm and dry entries of air masses, forced the availability of the abundant fine fuel, and put the system of extinction to its limit.



**Fig 3.** Comparative of the drought accumulated in the middle of May the last 4 summer fire seasons with the location of the more significant forest fires of this season.

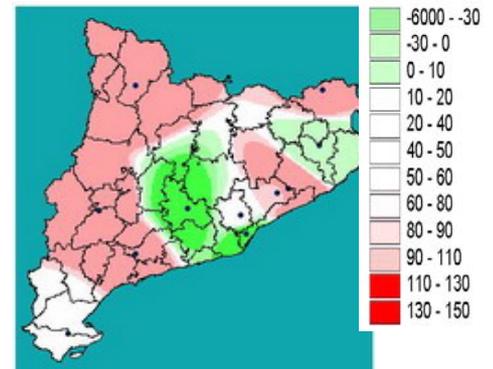
The beginning of this summer season is starting similar to that of 2003. After an autumn and a winter rainy, the spring has been very dry, and with dry air masses that have been moving above us. Even though this has limited the sprout of the herb, it has not been enough to avoid a summer season with large fires only in episodes low humidities, without recovery of air moisture during the night, when the herbs and fine fuel are available. The other factor that will mark this summer season, will be the dead material inherited from the drought of 2005 and the snowfalls of this year that will increase the distance of the spots.



**Fig. 4.** Accumulated drought (DC) 18/05/06, with data of more than 100 stations in Catalunya.



**Fig. 5.** Accumulated drought (DC) 17/05/05



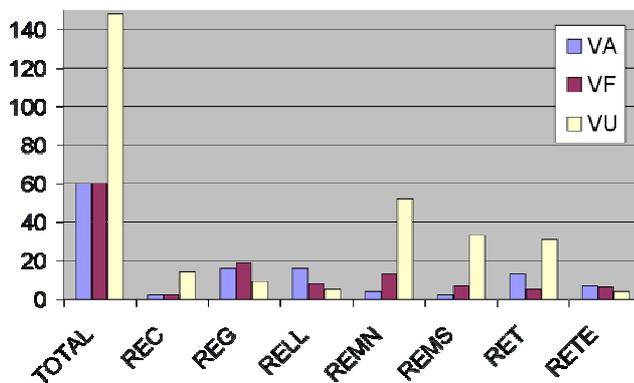
**Fig. 6.** Percentile % of drought (DC). Above normal, reds. Below normal green. Normal white 17/05/06



## Evolution of Services

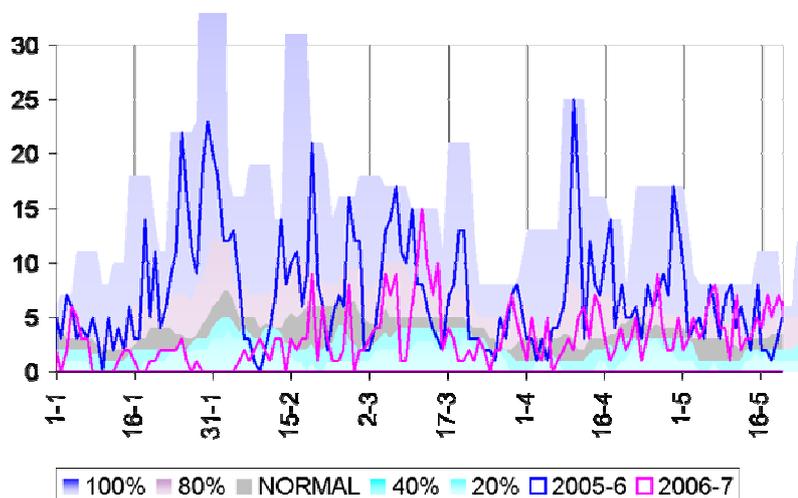
### What we had

The lack of rain increases the services, highlighting especially the increase of the services for urban vegetation that has practically duplicated. Low humidities provoke the first torching fires, with spots at 100 m of distance (Ulldemolins, 24/5, 4.5 has). The herbs are not available yet totally and fires that stopped in cereals due to certain greenness (Sant Fruitós de Bages 25/5). The same has been observed in prescribed burnings (Tivissa), where the quantity of old herb was not enough to burn the new green herb.



**Graphic 1.** Total number of services by region and type. VA=agricultural, VU=WUI, VF= forest (07/05/06 to 21/05/06)

**Graphic 2.** Mbs13 (services of forest fire) from 01/01/06 until 20/05/06, compared with the same period in 2004/5 (blue line) and compared to the normal number of fires (in grey 50% percentil, in blue lower than normal, in rose higher than normal) for the last 5 years.



The increased quantity of large fuels due to the frozen beginning of the year, are starting to be available with the lack of rains.

### What is forecasted

The forecasted fires are fast ones, since they are based on the dry herb and not on the shrubs or crowns. They will be slowly and progressively increasing intensity with the increase of the heat as the summer progresses. Possible large fires will be in days with important waves of Saharian air masses, or high north winds, and the duration of these will meteorological episodes will be key. The fields of cereal will be soon available to burn.



## Regions

REG

The increase of vegetative activity in spring implies that the green fuel is more hydrated. Only where there is accumulation of dry fuel, fine as well as thick, intensity and medium propagations can be observed.

**What is forecasted** Calmness, except in the episodes of north wind, with low intensity but fast.

REMN

The end of the spring has not brought the expected water. Slowly we keep on entering in fire season and the availability of the fine fuel starts to be marked in the metropolitan areas (margins of road, sites in the middle of polygons...).

**What is forecasted** Relative Calmness, the services of urban vegetation will increase in a progressive way.

REMS

The dry spring starts to have effects. In the (industrial) north of the region as well as in the (cereal) south, the fuel of 1hour is available. This explains the 2 ha fire in Torrelletes (25/06/06)

**What is forecasted** Relative calmness, the urban and agricultural services will increase in a progressive way. Attention to north wind and south saharian episodes.

REC

Cereal are starting to lose greenness, and the harvesting has started. This fuel is also a good indicator of fuel availability in the forest.

**What is forecasted** Attention to north wind and south saharian episodes, specially in the S- SW of the region.

RETE

It continues the process of progressive drying of the vegetation. The fine fuel is disposable (especially in the axis of the Ebre) where fires are not discarded in periods of low relative humidities.

**What is forecasted** Progressive increase of the activity regarding services in agricultural and urban terrains.

RET

Progressive drying of the vegetation. The fine fuel, especially in the zone neighbouring with the RELL is disposable, where surface fires, which secondary focuses at little distance (<50m) will still throw away, are not discarded.

**What is forecasted** Increase of the number of services (especially the ones declared in urban terrains) and surface fires and fires of half intensity.

RELL

It continues being the region that it shows index of drought accumulated higher, especially in the south of this, where also they already have started the tasks of cereal collection.

**What is forecasted** Possibility of surface fires associated to fine fuel and with little distance from generation of secondary focus (< 50 m), especially in episodes of south and concentrates at south half of the Region. An increase marked of the fires in urban, and especially agricultural terrains is foreseen.

### Degree of activity

Low
  Normal
  Medium
  Important
  Critical
  Big fire





## Aspects to highlight

### 3.1.- Self-protection formation

The lack of forest management floodgate important accumulations of fuel that they derive in every time more intense behaviour of fire and that they compromise not only the efficiency of the system of extinction, but the security of the persons, the defence of their goods and also the integrity of the staff of extinction. Nowadays is difficult to make understand to the society, that every time is more urban, that we cannot stop the propagation of the fires where we want but this strategy can only be made where the behaviour of the fire allows us it.

As a service of extinction we have to remember that the priorities during a forest fire are persons and goods, and therefore the equipment of extinction and the rest of groups that they intervene are a priority. The philosophy is to avoid heroic performances and to bring up efficient and safe performances. The professionalism is the less showy, but most effective option.

With this approach they have been organized in the town of the Fatarella, RETE, two conferences (25 May and 1 June) about security in forest fires. These conferences are addressed to intermediate and superior commands of the fire brigade and to representatives of the rest of groups who participate in the management of the emergency (Municipal Guards, Rural Agents, Guardia Civil and Army).

During this conference (already the one corresponding to the 25th has been celebrated) they are made reports concerning different situations with people caught up, the mechanical problems recorded until the moment and the measures for mitigate them. The attention is centred to the card referring to the manoeuvre of self-protection in case of being caught up with a water or tourism vehicle. Moreover, the zone of the fire of Nonasp of 1994, where 4 firefighters lost the life, is visited.

The final goal of this day is to bring to light the behaviour and tactics that they derive in situations of caught up, to insist on the importance of a correct analysis of the situation and forecast of the future behaviour of the fire, to learn to read the information of the environment, and to establish a protocol of security and of performance in these circumstances.



[http://10.136.11.250/foc\\_forestal/documents/index\\_docs.htm](http://10.136.11.250/foc_forestal/documents/index_docs.htm)



### 3.2.- Forest formation to new firefighters

During the period of the 8th May in the 2nd June the forest formation to the candidates to firefighters of the last promotion is being carried out in Tivissa (Tarragona).

This training, which has been organized in 4 different groups, has consist in a week for each group where there where imparted 50 hours, with the intention to be eminently applied (even though it combines with theoretical formation) for which the direction of the DGESC, together with the EBSCC, they have considered appropriate to move the staff in formation to this place.

In this way different aspects have been treated:

- Behaviour of forest fires, patterns of propagation of Great Forest Fires and Fire Analysis.
- Forest installations with water
- Manual and cut tools, creation of defence lines
- Basic manoeuvre of self-protection
- Creation of an emergency heliport and basic manoeuvre of transportation with helicopter.
- Utilization of the technical fire, backfire, enlargement burnings and prescribed burnings.

