

MEDWILDFIRELAB

"GLOBAL CHANGE IMPACTS ON WILDLAND FIRE BEHAVIOUR AND USES IN MEDITERRANEAN FOREST ECOSYSTEMS,
TOWARDS A « WALL LESS » MEDITERRANEAN WILDLAND
FIRE LABORATORY"

FORESTERRA ERA-NET





Forest fires in the Mediterranean basin

Millennia of **human activities** on Mediterranean **landscapes** have modified natural forest fire dynamics and the capacity of vegetation to respond to disturbances.

Furthermore, climate change, increasing climate or weather extremes (e.g. droughts or heat waves), is adding new threats and higher risks to cope with.





Global change due to climatic changes (temperature and precipitation)

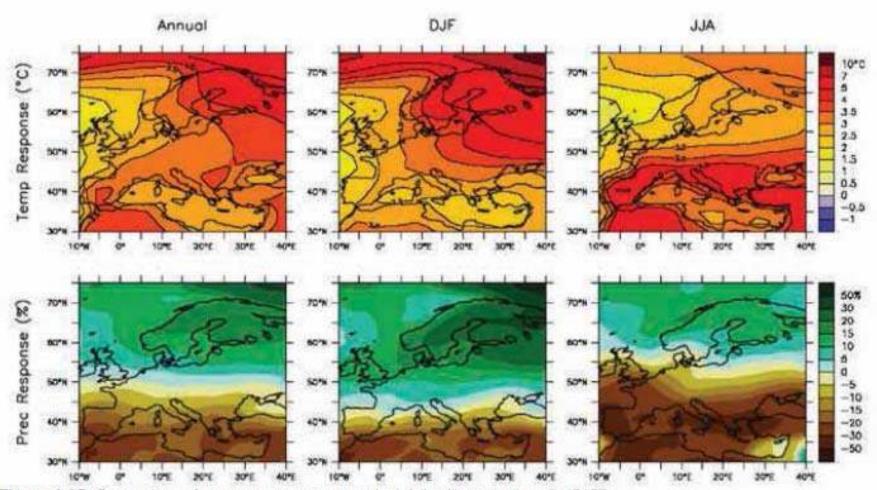


Figure 1.25. Comparison of current temperatures and rainfall, with projections for 2100

Note: DJF= December, January, February; JJA = June, July, August.

Source: IPCC, 2007b.



Scenarios for the Mediterranean in 2100:

	Temperature variation (°C)		Precipitation variations (°C)	
Season	Min	Max	Min	Max
Winter	+1.7	+4.6	-16	+6
Spring	+2	+4.5	-24	-2
Summer	+2.7	+6.5	-53	-3
Autumn	+2.3	+5.2	-29	-2
Annual	+2.2	+5.1	-27	-4

Source: IPCC, 2007b.

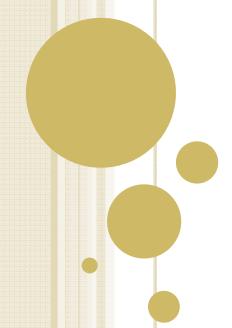


MedWildFireLab

1st October 2014

To

31st March 2017



Partner	Responsible	
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Three major aims:

- To enhance the cooperation and exchange of knowledge between scientists and students, between engineers, technicians and workers among Mediterranean fire research and technological development teams
- To ensure the transfer from basic to applied research in this domain for the Mediterranean environment in the context of global change: change of land use and climate change.
- To develop a Euro-Mediterranean Research Area in the wildland fire domain coherent with the European Union's objectives, the European Parliament's and Union for the Mediterranean's recommendations.



Five main goals:

- To improve the efficiency of research through exchange of knowledge
- To select common concepts and vocabulary
- To foster data sharing and mutual opening of existing infrastructures (experimental sites, research facilities, databases...)
- To elaborate adapted methods for research and technological development
- To integrate the specific spatial scales and diverse roles of the Mediterranean wildland areas, mainly those concerned by wildland fires
- To achieve these aims and goals, thepartners constitute a multidisciplinary consortium at Mediterranean scale.

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General structure

WP6 WP1

WP1: Coordination

WP2. Physical and Chemical Sciences

WP3. Biological Sciences

WP4. Social and Human Sciences

WP5. Technological Activities (Wildland Urban Interface & Prescribed Burning)

WP6. Wildland Fire Fighting Training

WP7. Promotion actions

WP8. Towards a wall-less Mediterranean Wildland Fire Laboratory

WP9. Communication and Dissemination



WP1: Coordination, Management and Governance of the project

Coordination team: ISA-CEABN (Coordinator), UCM-GPSF (Deputy coordinator (administrative secretariat), and a secretariat, in order to:

(i)ensure the implementation of the project activities in due time

(ii)promote efficient relationships among the consortium





WP2. Contribution of Physical and Chemical Sciences

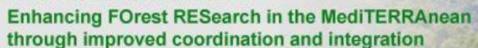
Task 2.1. Global change impacts on wildland fire ignition process

Task 2.2. Global change impacts on wildland fire behaviour

Task 2.3. Evaluation of wildland fire behaviour models or systems of models









WP3. Contribution of Biological Sciences

Task 3.1: State of the art

Task 3.2. Characteristics of dead wildland fuel

Task 3.3. Characteristics of living wildland vegetation – potential fuel

Task 3.4. Restoration of burned areas





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WP4. Contribution of Social and Human Sciences

Task 4.1. State of the art

Task 4.2. Socioeconomic causes and factors of wildland fires

Task 4.3. Influence of the recent territorial dynamics in fire regimes





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WP5. Technological Activities

Task 5.1. Up-dated state of the art

Task 5.2. Promote

methodologies for the

management of the

Wildland-Urban Interfaces

Task 5.3. Prescribed burning, a tool for forest management





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WP6. Wildland Fire Fighting Training

Task 6.1. State of the art:

Task 6.2. Wildland firefighters training for the future in Mediterranean basin

Task 6.3. Initiation and scientific support of training for the future





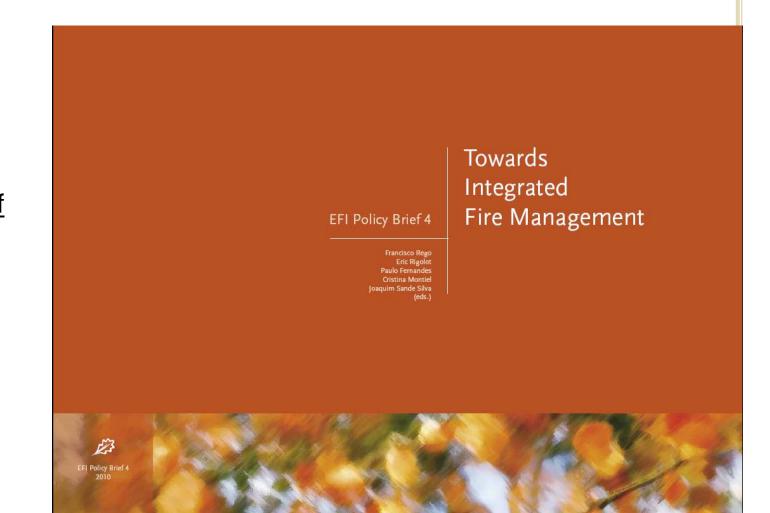
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WP7. Promotion actions towards National, European and Mediterranean Institutions

Task 7.1. Elaboration and dissemination of Policy briefs

Task 7.2. Dissemination of the Policy briefs by the coordination staff and the Steering Committee





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WP8.Towards a wall-less Mediterranean Wildland Fire Laboratory

Task 8.1. Conditions and agreements contents for creating a long term cooperation structure

Task 8.2. Launching of the eponym TJRU: the wall-less Mediterranean Wildland Fire Laboratory

European Forest Institute Research Report 23

The approach taken in the Fire Paradox project was based on the paradox that fire can be a bad master but a good servant, thus requiring the consideration of the negative impacts of current wildfire regimes (understanding fire initiation and propagation) and the beneficial impacts of managed fires in vegetation management and as a planned mitigation practice (prescribed burning together with some traditional fire uses) and for combating wildfires (suppression fire). These were the four integration pillars of the project.

This Research Report reflects the structure of the project, corresponding to its integration pillars—initiation, propagation, prescribed burning and suppression fires—and including a closing chapter which synthesizes and combines the main project outcomes. The book provides science based knowledge that can assist policy makers to develop the necessary 'common strategies' to elaborate and implement integrated fire runsagement policies. It makes extensive use of the science and technology findings from the Fire Paradox project, focusing on policies and best management practices, as well as providing guidelines for the future.

The Fire Paradox project (2006–2010) was funded by the European Commission Research and Development 6th Framework Program. The project included 30 partners from eleven European countries and six partners from Africa, South America and Asia, with close support from an International Advisory Committee formed by nine specialists from the USA, Canada and Australia. Fire problems and solutions are found all over the world, and we see the knowledge exchange and benefits of Fire Paradox will extend far beyond Europe.

Towards Integrated Fire Management – Outcomes of the European Project Fire Paradox

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Joaquim Sande Silva Francisco Rego Paulo Fernandes Eric Rigolot (editors)





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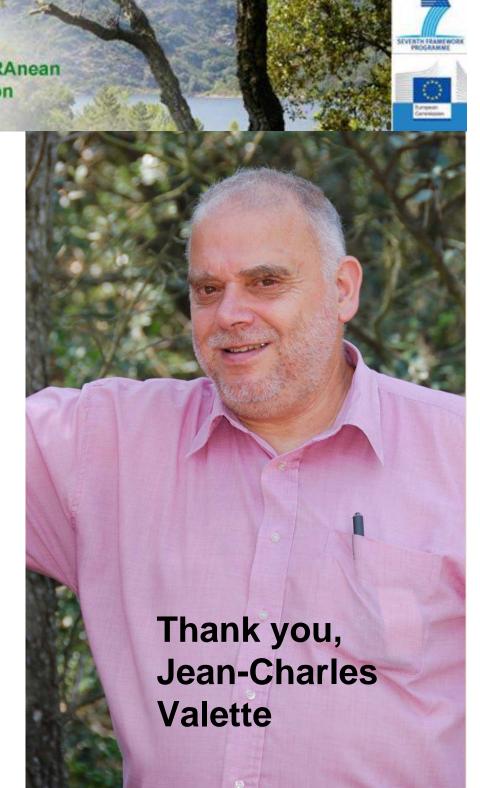
WP9 Communication and MedWildFireLab Web site www.medwildfirelab.org

Task 9.1. MedWildFireLab e-Bulletin

Task 9.2. MedWildFireLab e-Library will be based on a previous e-Library developed under **EUFIRELAB** project and Fire Intuition (FIRE PARADOX)

Task 9.3 MedWildFireLab e-Observatory will contain 1500 references up-dated on **EUFIRELAB web** site (work by Jean-Charles Valette)

Task 9.4. Others functions







The long-term vision:

A long-term cooperation structure, as the proposed Transnational Joint Research Unit (TJRU) in the Wildland Fire Domain, is absolutely required to make full use of all the extraordinary progress in knowledge and the very substantial technical achievements made with public funds (national and EU) in the past decades.

This is a major goal of the consortium and the idea behind the wall-less Mediterranean Wildland Fire Laboratory.