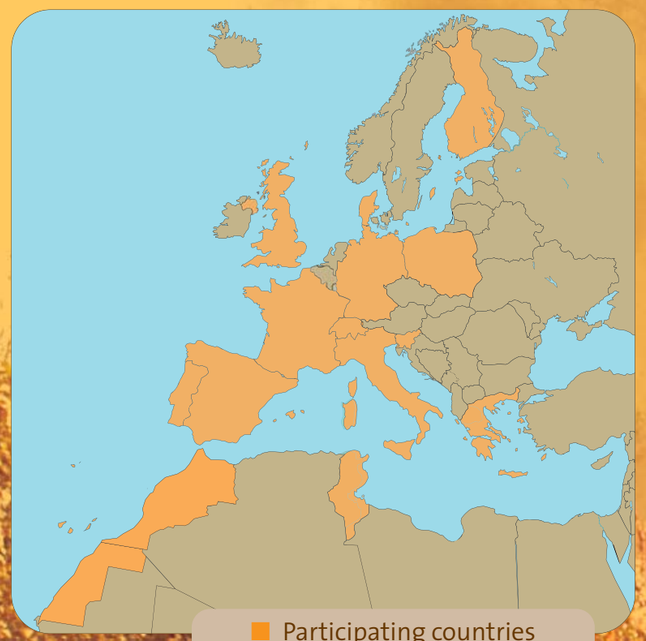
SHARING EXPERIENCES FROM DIFFERENT GEOGRAPHICAL REGIONS OF EUROPE

The FIRE PARADOX consortium includes 31 partners from 13 different countries affected by wildfires.



Participating countries

Project extended to 4 countries in the frame of specific measures in support of International Co-operation (INCO)

Further information

Project acronym: FIRE PARADOX
Project full title: An Innovative Approach of Integrated Wildland Fire Management Regulating the Wildfire Problem by the Wise Use of Fire: Solving the Fire Paradox
Contract no: FP6-018505
Start date: March 2006
Duration: 48 months
E U contribution: about 12 M
Total cost: about 15 M
http://www.fireparadox.org

COORDINATION
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Members of the FIRE PARADOX Consortium

FINLAND : VTT, Technical Research Centre of Finland, Espoo

FRANCE : Agence MTDA, Aix-en-Provence; EM, Espaces Méditerranéens, Fox-Amphoux; CEMAGREF, Centre National du Machinisme Agricole, du Génie Rural des Eaux et des Forêts, Aix-en-Provence; UAM2, Université de la Méditerranée, Aix-Marseille II; INRA-URFM-PIF, Institut National de la Recherche Agronomique, Avignon

GERMANY : GFMC, Fire Ecology Research Group / Global Fire Monitoring Center, Max Planck Institute for Chemistry, Freiburg University, Freiburg

GREECE : AUTH, University of Thessaloniki, Thessaloniki; MAICh, Mediterranean Agronomic Institute of Chania, Chania, OMIKRON – Environmental Engineering and Technical works design, study, management Ltd, Thessaloniki

ITALY : CFVA, Corpo Forestale e di Vigilanza Ambientale delle Regione Autonoma della Sardegna, Cagliari; ARBOPAVE-UNINA, Dipartimento di Arboricoltura, Botanica e Patologia Vegetale – Università degli Studi di Napoli Federico II, Portici

MOROCCO : ENFI, Ecole Nationale Forestière d'Ingénieurs, Salé

POLAND : FRI-FFPL, Forest Research Institute, Warsaw

PORTUGAL : UTAD-DF, Universidade de Trás-os-Montes e Alto Douro, Vila Real; IST-DEM, Instituto Superior Técnico, Lisboa; ISA-CEABN, Instituto Superior de Agronomia, Lisboa

SLOVENIA : SFI, Slovenian Forestry Institute, Ljubljana

SPAIN : DGESC-GRAF, Generalitat de Catalunya – Departament d´Interior – Departament General d´Émergencies i Seguretat Civil – Grup de Recolzament d´Actuacions Forestals, Tivissa; INIA-CIFOR, Instituto Nacional de Investigación y Tecnologia Agraria y Alimentaria, Madrid; UC3M, Universidad Carlos III de Madrid, Madrid; UL-UFF, Universidad de Lleida, Lleida; UCM-GIPSF, Universidad Complutense de Madrid – Grupo de Investigación Politica y Socioeconomia Forestal, Madrid; CTFC, Centre Tecnologic Forestal de Catalunya, Solsona; XG-CIFAL, Centro de investigaciones Forestales y Ambientales de Lourizán – Centro de Desenvolvemento Sostenible, Consellería de Media Ambiente, Xunta de Galicia –, Pontevedra

SWITZERLAND : UZH, University of Zurich Univers, Zurich; WSL, Swiss Federal Institute for Forest, Snow and Landscape Research, Bellinzona

TUNISIA : INRGREF, National Institute of Research in Rural Engineering, Water and Forest, Ariana

UNITED KINGDOM : UBRIS, University of Bristol, Bristol; UEDIN, The University of Edinburgh,

INTERNATIONAL : EFI, European Forest Institute

Members of the FIRE PARADOX - TTC Consortium

PORTUGAL : ISA/CEABN, Instituto Superior de Agronomia, Lisboa

ARGENTINA : CIEFAP, Centro de Investigacion y Extension Forestal Andino Patagonico, Esquel; INTA, Instituto Nacional de Tecnologia Agropecuaria, Buenos Aires

SOUTH AFRICA : SFS, Silva Forest Services, Sedgefield

RUSSIA and MONGOLIA: PFF, Pacific Forest Forum, Khabarovsk

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FIRE PARADOX

REGULATING THE WILDFIRE PROBLEM BY THE WISE USE OF FIRE

« Fire is a bad master but a good servant »
Finnish proverb

An Innovative Approach of Integrated Wildland Fire Management - A joint European initiative -

FIRE PARADOX

Fires are the most destructive factor in the Mediterranean countries' forests. Every year around 400 000 hectares of forests and other rural areas are burnt. Fire Paradox is a European integrated project on fire management, coordinated by the Instituto Superior de Agronomia, Lisbon, Portugal.

The fire paradox

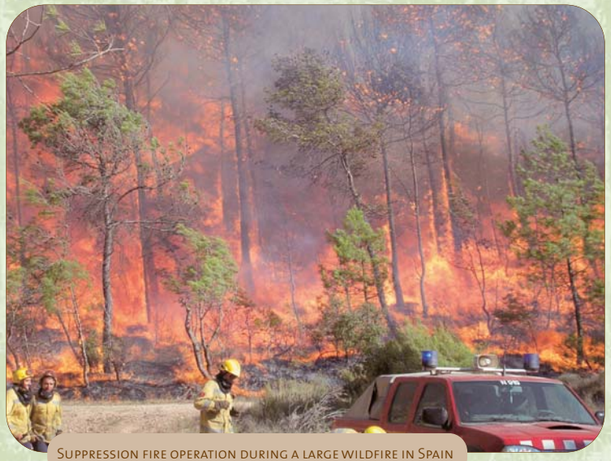
Wildfires can be very destructive. Humans have always resorted to fire to attain management objectives and regulate natural ecosystems, but such fires often go out of control and have detrimental impacts. The attempt to exclude fire can, on the other hand, lead to catastrophic wildfires in the future. European research and experience highlight the need to design fire management policies and practices that mitigate wildfire severity.

Solving the Fire Paradox: using fire to prevent fire

FIRE PARADOX sets the basis for a fire management policy in the European Union. The central objective of Fire Paradox is to prevent the current disastrous social, economic and environmental consequences of wildfires in the Mediterranean environments. The approach is innovative: the regulation of the wildfire problem is based on the wise use of fire.

Learning the different views of fire

- **Prescribed burning,**
A versatile and powerful tool, used especially to reduce fuel hazard
- **Wildfire initiation,**
The outcome of early fire detection and suppression is crucial to the success of policies focused on readiness and response
- **Wildfire propagation,**
With a special emphasis on important issues related to large wildfires, such as the spread by spotting or the threat to structures and people in the wildland-urban interface
- **Suppression fire,**
A technique to expand the wildfire control capacity of firefighting operations.



Catalan Firefighters, DGESC

Suppression fire operation during a large wildfire in Spain

Paulo Fernandes, UTAD

Prescribed burning training in a Portuguese shrubland (Northeastern Portugal)

Catherine Tailleux, Cemagref

Wildland-urban interface problem in the French Mediterranean

Paulo Fernandes, UTAD

Wildfire stopped on a fuel break recently maintained with prescribed burning

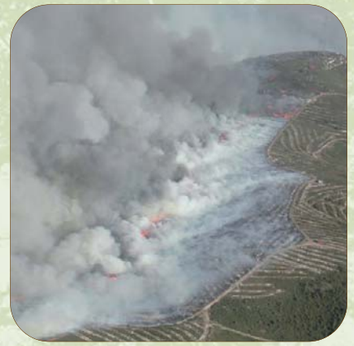
Prescribed burning professional training in a pine stand (The Canary Islands, Spain)

Christophe Maitre, INRA

Experimental laboratory fire for the study of flame properties

Paulo Fernandes, UTAD

Prescribed burning under Pinus pinaster stand (Portugal)



Suppression fire along a forest road in Catalonia (Spain)

Research

The research domain is based on the understanding of the processes associated with fire, obtained from experimentation, sampling and modelling efforts according to the nature of the investigated processes.

- *towards a 3D fire model*
- *coupling physical and biological mechanisms for fire effect modelling*
- *socio-economic and anthropological analysis of traditional versus future use of fire*

Development

- *technological and software developments concerning the various aspects of fire (Fuel editor and fire effect visualisation system; European Fire Simulator; hazard assessment)*
- *method to produce fuel maps using satellite imagery*
- *spatial analysis and vulnerability assessment at the wildland-urban interfaces*
- *hazard assessment and mapping by combination of daily and structural factors*
- *setting the bases for new legislation and long term policy measures for wildland fire management*
- *European field bases for fire monitoring*
- *demonstrations of prescribed burning and suppression fires*

Dissemination

- *Fire Paradox project will have an impact on policy making and initiative with regards to integrated wildland fire management*
- *academic and professional training on prescribed burning and suppression fires*
- *public awareness strategies analysis*
- *the Fire Paradox white book*