



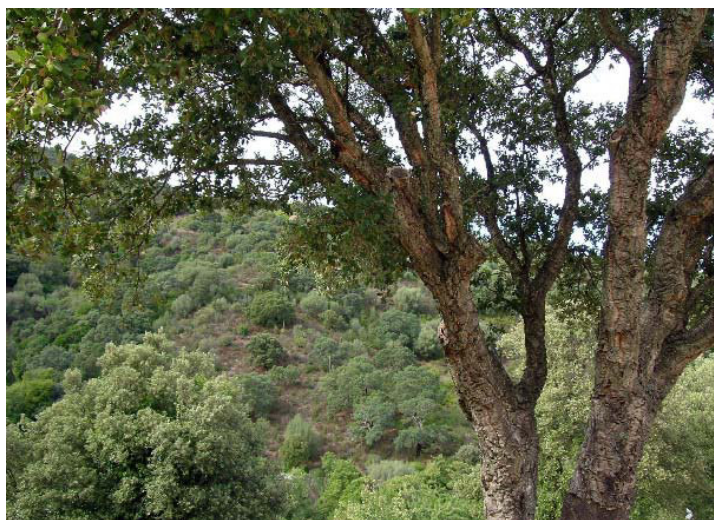
*Department of Science
for Nature and
Environmental
Resources of the
University of Sassari*



*Forestry and Wood
Research Centre of the
Italian Council for
Agricultural Research and
Economics*



*Institute of Ecosystem Study of the
National Research Council,
organization unit of Sassari*



INTERNATIONAL CONGRESS ON CORK OAK TREES AND WOODLANDS

Conservation, Management, Products
and Challenges for the Future



3° National Congress of Cork

Sassari, May 25 – 26 2017

SPONSORSHIP



REGIONE AUTONOMA DE SARDIGNA
REGIONE AUTONOMA DELLA SARDEGNA



Comune di Sassari



Fondazione
di Sardegna



CONFINDUSTRIA
Centro Nord Sardegna



CORPO FORESTALE
E DI VIGILANZA AMBIENTALE

Forestas

*Agenzia forestale regionale pro s'isvilupu de
su territoriu e de s'ambiente de sa Sardigna*
Agenzia forestale regionale per lo sviluppo
del territorio e dell'ambiente della Sardegna



REGIONE AUTONOMA DE SARDIGNA
REGIONE AUTONOMA DELLA SARDEGNA



EFI

European Forest Institute



Accademia Italiana Scienze
Forestali



Società Italiana di Selvicoltura
ed Ecologia Forestale



Società di Ortoflorofruitticoltura
Italiana

ISBN **978-88-907678-0-7**

DOI **<https://doi.org/10.14275/978-88-907678-0-7>**

Tipiditappi



*Sughero d'albero fatto a pezzetti,
tipi di tappi , quelli che vuoi.
Tagliali lunghi, tagliali stretti,
tipi di tappi, fatti da noi.
Taglialo bene, taglialo tondo,
tipi di tappi, quanti ne vuoi.
Tappi di sughero per tutto il mondo,
tipi di tappi fatti da noi.*
(Cecchi-Tognolini, Filastrocche e Canzoni)

Dettori S., Fligheddu M.R., Cillara M. Editors

Printed by
Università degli Studi di Sassari
Centro Stampa

ORAL PRESENTATION

Session 2: *Forest monitoring and management, land and forest planning*



RECENT DYNAMICS OF FOREST FIRES IN *QUERCUS SUBER* STANDS IN SARDINIA, CORSICA AND CATALONIA

Salis M.^{1*}, Arca B.², Alcasena-Urdiroz F.³, Massaiu A.⁴, Bacciu V.¹,
Diana G.⁵, Bosseur F.⁶, Caramelle P.⁴, Santoni P.A.⁶, Molina Terren D.³,
Vega-Garcia C.³, Dettori S.⁷, Spano D.^{1,7}

¹ Euro-Mediterranean Center on Climate Change (CMCC), IAFES Division of Sassari (Italy),

² National Research Council, Institute of Biometeorology of Sassari (Italy),

³ University of Lleida (Spain),

⁴ Forest National Office (ONF) (France),

⁵ Sardinia Forest Service (CFVA) (Italy),

⁶ University of Corte (France), and

⁷ Department of Science for Nature and Environmental Resources, University of Sassari (Italy)

*Corresponding Author: michele.salis@cmcc.it; miksalis@uniss.it

Quercus suber L. forests cover large areas of the Mediterranean landscapes, and represent a key source of income and jobs related to the harvesting and transformation of the cork bark. Furthermore, cork oak forests are associated with high biodiversity and conservation value, and also provide a number of goods and services (e.g.: pastures, leisure activities, beekeeping, mushrooms, shelter for animals). The most relevant disturbance for *Quercus suber* stands, as well as for Mediterranean forests, is represented by forest fires, although cork oaks are able to survive and resprout (from stem buds or basal buds) after fire. In the Mediterranean basin, fires are typically concentrated in summer, and can be responsible of huge damages and large burned areas, particularly in correspondence of extreme weather conditions (dry fuels, strong winds, low relative humidity). In this study, we analyzed the recent dynamics of forest fires in *Quercus suber* stands in Sardinia (Italy), Corsica (France), and Catalonia (Spain) for the period 2003-2015. The analysis was carried out by combining forest data and historic fire perimeters, which were harmonized to allow comparisons among the study areas. On the whole, the study areas are characterized by about 260,000 ha of *Quercus suber* forests, which corresponds to about 18% of the European cork oak area. Approximately 21,000 ha of cork oak stands were affected by fires in the period 2003-2015: Sardinia accounted for about 60% of the *Quercus suber* stands burned in the study areas. A limited number of large fires was responsible of the most of the area burned in *Quercus suber* forests. Overall, the study highlighted a number of specific spatial and temporal trends of the fire issue on *Quercus suber* stands for the fire-prone Mediterranean areas under investigation.

Keywords: forest fires; cork oak; Mediterranean areas; fire management; forest management